

Ministry of Culture, Environment and Tourism, Sabah
Economic Planning Unit, Malaysia
Danish Co-operation for Environment and Development (DANCED)

Sabah Biodiversity Conservation Project, Malaysia

Consolidated Project Completion Report

December, 1998

DANCED ref.: 123/324 - 0036

This Report Contains Restricted Information and is for Official use only

Project Co-ordination Unit
Technical Assistance:

- **COWI in association with ORNIS Consult and World Wide Fund for Nature (Denmark)**
- **World Wide Fund for Nature Malaysia**

This document is prepared by staff and / or advisors of the Sabah Biodiversity Conservation Project. It expresses as such the opinion of the authors alone and thus not necessarily that of any agency of the government of Malaysia or foreign.

Project name : Sabah Biodiversity Conservation Project
Component : Project Coordination Unit
Document Title : Consolidated Project Completion Report
Date of Present Issue : Dec. 6, 98
Prepared by : J.Gabriel, E.O.Kofod, J.Payne
Checked by : L.Ambu, E.Juin
Approved by : Monica Chia
Document number : 51-13
Revision number : 8
Document status : Draft

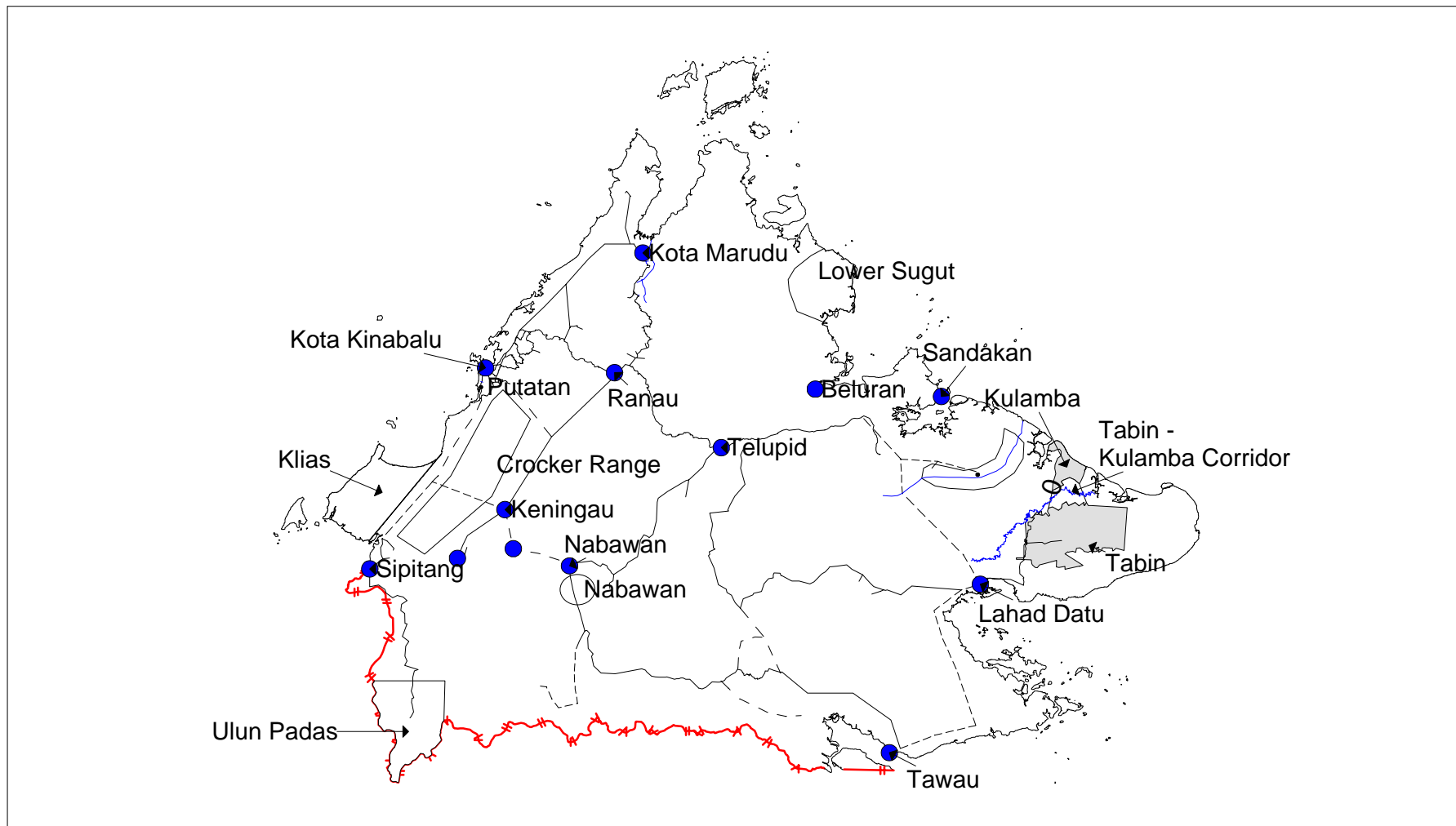


Figure 1 Map of Sabah and Project Sites

KEY DATA SHEET

Country	:	Malaysia
Project Area	:	Sabah (including the Tabin Wildlife Reserve, the Lower Kinabatangan Basin and various possible protected areas)
Sector	:	Environment
Project Title	:	Sabah Biodiversity Conservation Project
Overall objective	:	Improved, sustainable use of Sabah's biological resources
Immediate objective	:	1) Capacity of Ministry of Tourism and Environmental Development and other relevant government agencies Concerned with the conservation and management of Biological resources in Sabah enhanced
Executing Agency	:	Federal Economic Planning Unit, Malaysia
Implementing Agency	:	Ministry of Culture, Environment and Tourism, Sabah
Report No.	:	51-13
Period Covered	:	September 1995 – November 1998
Prepared By	:	J.Gabriel, E.O.Kofod, J.Payne.
Date	:	5 December 1998
Project period	:	Five years (with DANCED support scheduled to terminate After three years) Project inception date 1 September, 1995 Project fully operational 1 January, 1996 DANCED participant ends 31 December, 1998
Next Report due	:	
DANCED Grant	:	DKK 19,248,656
Host Government	:	
Contribution	:	In kind
Government Agreement signed	:	December 1994
Government Agreement amended	:	December 1995
Project Document Signed	:	December 1994
Project Document Amended	:	April 1996

List of Contents

KEY DATA SHEET	5
1. EXECUTIVE SUMMARY	11
2. INTRODUCTION	14
3. PROJECT CONTEXT	17
3.1 Assumptions	17
3.2 Opportunities For Strengthening Project Impacts	19
3.2.1 Direct Impact	19
3.2.2 Legislative strength for environmental conservation	20
3.2.3 Establishment of Department of Environmental Conservation	20
3.2.4 Input to Sustainable Management of Commercial Forest Reserves	20
3.2.5 Sabah Forest Department	21
3.2.6 Sabah Wildlife Department	21
3.3 National Priorities	21
3.3.1 Project Impact on land use planning	21
3.3.2 Impact on economy	22
3.3.3 International biodiversity obligations	22
3.4 Project Impacts and Relevance in Relation to Sectoral Priorities	23
3.4.1 Relevance to Sustainable Forest Management	23
3.4.2 Possible benefits to tourism sector	23
3.4.3 Stemming species extinction arising from oil palm extension	24
3.5 Project Impacts and Relevance in Relation to Regional Priorities	25
3.5.1 Awareness of biodiversity and Environmental Conservation	25
3.5.2 Endorsement and support for water catchment management	25
3.5.3 Regional planning for conserving original ecosystems	25
3.5.4 Project Relevance	26
3.6 Target Group Priorities	26
3.6.1 Project Impact	26
3.6.2 Project Relevance	27
4. PROJECT OUTPUTS	28
4.1.1 Project Co-ordination Unit	28
4.1.2 Tabin	29
4.1.3 Identification of Potential Protected Areas	30
4.1.4 Kinabatangan	30
5. PROJECT INPUTS	31
5.1 Summary of DANCED Inputs	31

5.2	Technical assistance	31
5.2.1	COWI	32
5.2.2	World Wide Fund for Nature Malaysia	32
5.3	Local Staff	34
5.4	Materials and Equipment	34
5.5	Summary of Malaysian Inputs	35
5.5.1	Facilities	35
5.6	Deviations	36
6.	FINANCIAL STATEMENT	38
7.	PROJECT SUSTAINABILITY	42
7.1	Continued Delivery of Benefits	42
7.2	Institutional Capacity	42
7.3	Continued Support from Stakeholders	43
7.4	Physical Infrastructure	44
8.	IMPACT ASSESSMENT	45
8.1	Effectiveness in Achieving Objectives	45
8.2	Deviations	46
8.3	Unintended Impacts	46
9.	RECOMMENDATIONS	47
9.1	Project Extension	47
9.2	Follow-up Activities	47
9.2.1	Capacity Building for the Department of Environmental Conservation	48
9.2.2	Capacity Building for the Wildlife Department	48
9.2.3	Identification of Potential Protected Areas	48
9.2.4	Kinabatangan	50
10.	LESSONS LEARNED	51
10.1	Overall Lessons	51
10.2	Capacity Building	52
ANNEX A	ASSUMPTIONS MONITORING FORM	
54		

ANNEX B	OUTPUT MONITORING FORM	
56		
ANNEX C	FINANCIAL STATEMENT	
62		
ANNEX D	PROCUREMENT SUMMARY	
64		
ANNEX E	AMENDMENTS TO THE PROJECT DOCUMENT	
70		
ANNEX F	LIST OF REPORTS	
73		
ANNEX G	PROPOSED PROJECT EXTENSION	
83		
ANNEX H	LIST OF TRAINING ACTIVITIES	
87		
ANNEX I PROPOSALS FOR FOLLOW-UP ACTIVITIES		89
Introduction		89
Government Execution of the Sabah Biodiversity Conservation Project		90
Wildlife Department		90
Head Quarters		90
Training Centre		91
Kinabatangan		91
Tabin Wildlife Reserve		91
Department of Environmental Conservation		92
Departmental Support		92
Identification of Potential Protected Areas		92
ANNEX J	PROJECT IDEA DESCRIPTION	
93		
ANNEX K	TERMS OF REFERENCE FOR PROJECT PROPOSAL STAGE	
98		

List of Tables

Table 1 COWI Technical Assistance Consumption (Man-months)	32
Table 2 WWFM Technical Assistance, Identification of Potential Protected Areas (Man months).....	33
Table 3 WWFM Technical Assistance, Kinabatangan (Man months)	34
Table 4 Counterpart Staff.....	35
Table 5 Operation Cost, Project Co-ordination Unit	39
Table 6 Operation Cost, Tabin.....	40
Table 7 Operation Cost, Identification of Potential Protected Areas.....	41
Table 8 Operation Cost, Kinabatangan	41
Table 9 Output, Project Co-ordination Unit	57
Table 10 Output, Identification of Potential Protected Areas	58
Table 11 Output, Kinabatangan	59
Table 12 Outputs, Tabin	60
Table 13 Project Financial Statement in Malaysian Ringgit.....	63
Table 14 Procurement by Subject and Type of Activity	64
Table 15 Procurement by Sector and Type of Supplier	65
Table 16 Investments, Identification of Potential Protected Areas.....	65
Table 17 Investments, Tabin	66
Table 18 Investments, Kinabatangan	68
Table 19 Investments, Project Co-ordination Unit	68
Table 20 Government Investment, Furniture.	69
Table 21 Permanent Investments	69
Table 22 Vehicles.....	69
Table 23 Revised Project Planning Matrix	70
Table 24 Project Co-ordination Unit Reports	74
Table 25 Tabin Reports.....	77
Table 26 Kinabatangan Reports	78
Table 27 Identification of Potential Protected Areas Reports.....	78
Table 28 Financial Reports	79
Table 29 Technical Reports, COWI.....	79
Table 30 Additional Reports from Identification of Potential Protected Areas.....	80
Table 31 Summary of Project Extension costs	86
Table 32 Operations Cost, Project Extension	86

List of Figures

Figure 1 Map of Sabah and Project Sites	4
Figure 2 Project Organisation	15

List of Abbreviations

DANCED Danish Co-operation for Environment and Development

DKK Danish Kroner

MYR Malaysian Ringgit

NGO Non Government Organisation

In quotations from the Project Document:

GOS Government of Sabah

GOM Government of Malaysia

GO Government Organisation

1. EXECUTIVE SUMMARY

The Sabah Biodiversity Conservation Project was agreed upon in 1994 with the signing of a Project Document and a government Project Agreement December 1994. This project was to ‘*..improve and sustain the use of biological resources of Sabah State.*’ (Project Document, 1994) through three field components and a Project Co-ordination Unit. The field components were

- Identification of Potential Protected Areas;
- Management Support to Tabin Wildlife Reserve;
- Multidisciplinary Conservation Study of the Lower Kinabatangan Basin.

The then Ministry of Tourism and Environmental Development was the implementing agency with implementation being delegated to the ministry’s Environmental Development Division and the Wildlife Department. Technical assistance was provided by COWI of Denmark for some activities and by World Wide Fund for Nature Malaysia for others.

The provision of technical assistance staff from two sides proved difficult for the project management as the two sides advocated different approaches. The World Wide Fund for Nature Malaysia being focused on field implementation while the COWI team focused on training and capacity building.

The project spent the inception period with management and planning training bringing the staff standard within management and planning tools such as the logical framework approach, critical path analysis and budgeting to a high level. This enabled the Project Director and the Component Team Leaders of Tabin and the Project Co-ordination Unit to take charge of their respective components.

Project methods investigation methods included direct observation, interviews, seminars, workshops and sociological methods such as the Participatory Rural Appraisal, whereas emphasis on data storage and processing focused on the introduction of latest computer technologies.

The Project Co-ordination Unit completed its training and awareness tasks successfully after detailed need analysis. Training subjects were selected to raise the participants' technical and management skills to a high level. Training aimed at personality building; attitude and widening of general horizon were also conducted.

The Kinabatangan component was completed within six months and provided sufficient data for the Government to proceed with actual steps to ensure protection and proper management of the Lower Kinabatangan Basin. Studies in the area covered socio-economic aspects, tourism potentials, fisheries and biology. These studies were documented in separate reports as well as a consolidated report containing a list of recommendations.

The Tabin component concerned support to the management of the Tabin Wildlife Reserve on selected issues listed in the Tabin Management plan. The staff was trained in management and methods for biological surveys and monitoring. The training was done simultaneously with large scale field exercises involving officers from other Wildlife Department offices and even other institutions.

This provided capacity building as well as a large data base with information hitherto not available.

Reserve protection continues to pose a problem with much of the reserve being inaccessible without weeks of trekking. A protection strategy was formulated including detailed proposals for its implementation.

The project rehabilitated an old logging road thereby enabling the management to be extended to the interior of the reserve.

Other infrastructure investments were holding facilities for rhinos and a telephone communication tower in addition to office and field equipment.

Sociological work was conducted in selected villages and the project funded a school, S.K.Tabin, in Kampong Parit.

The Identification of Potential Protected Areas component focused on providing biodiversity and sociological data for the purpose of future protection of selected areas. These areas were selected in accordance with the newly adopted Sabah Conservation Strategy. The areas were:

- Ulu Padas
- Crocker Range Foothills
- Nabawan
- Lower Sugut Klias
- Lower Segama
- Commercial Plantations

These areas represent a very wide range of Sabah's natural habitats in addition to the man-made plantations.

Intensive biological, physical and sociological studies were made and documented. This led to the discovery of new species in Sabah and an increased awareness and

dialogue among several stake holders such as the rural populations, logging concessionaires, planters and governmental agencies.

All in all, more than 120 reports were produced by the project, 40 formal training courses were held and management proposals were made for 7 distinct areas of biodiversity interest as well as for the plantation sector.

Several new species of plant and animal life were discovered and included in state collections.

The project worked well within the given financial framework. Funds were sufficient at all levels and for all planned purposes.

DANCED funding amounted to about 19 million Kroner (Ringgit 11.2 million (Dec 1998)) and covered field operation cost, technical assistance cost (advisors) and reimbursement of three government staff salaries.

Government contribution covered national staff and office space.

The project management's analysis of the project's achievements indicates a high rate of success and promises of sustainability. This was also found by the external Mid Term Review, which commended the project for its achievements.

As a result of the Sabah Biodiversity Conservation Project a new project has been agreed upon between Malaysia and DANCED regarding capacity building for the Department of Environmental Conservation. A similar project is being proposed for the Wildlife Department.

In addition, the Sabah Biodiversity Conservation Project was instrumental in securing DANCED support to the Likas Wetlands and to two study tours to Denmark for senior government staff and the Minister of Tourism and Environmental Development.

The Sabah Biodiversity Conservation Project was also active in the discussions leading to the formulation of new legislation for wildlife management and for environmental conservation, the latter being the basis for the creation of the Department of Environmental

2. INTRODUCTION

The Sabah Biodiversity Conservation Project originated from project ideas submitted to DANCED 1993 – 1994 by the then Ministry of Tourism and Environmental Development and World Wide Fund for Nature Malaysia. These project ideas were all supported by the newly completed Sabah Conservation Strategy.

Several ideas were at that time submitted and combined by DANCED into one project: the Sabah Biodiversity Conservation Project. This project was to ‘*..improve and sustain the use of biological resources of Sabah State.*’ (Project Document, 1994).

The project came to consist of three field components and a Project Co-ordination Unit. The field components were

- Identification of Potential Protected Areas;
- Management Support to Tabin Wildlife Reserve;
- Multidisciplinary Conservation Study of the Lower Kinabatangan Basin.

In addition to administration and co-ordination, the Project Co-ordination Unit was given tasks within training and awareness.

The general justification of the project was that the biodiversity of Sabah, which is considered one of the richest in the world, was found under considerable pressure from various development efforts. Forests were logged, wetlands were drained, hills were cut, and the natural environment was transformed into man-made landscapes of plantations and urban areas.

The intentions were not to stop the development, rather to ensure the rich biodiversity was made part of the development to the benefit of present and future generations.

The time frame of the Sabah Biodiversity Conservation Project was initially envisaged to 5 years, 3 years with DANCED support and two without.

During these years, the Ministry of Tourism and Environmental Development and its line agencies, the Environmental Development Division and the Wildlife Department would provide local staff and logistics support while DANCED would provide technical assistance and operational funding.

The technical assistance was to be provided through a Danish consulting company, who was to include advisors from World Wide Fund for Nature Malaysia through a subconsultancy arrangement. However, this arrangement was rejected by the World Wide Fund for Nature Malaysia. The result was a unique set up with two independent technical assistance providers (see Figure 2 Project Organisation below).

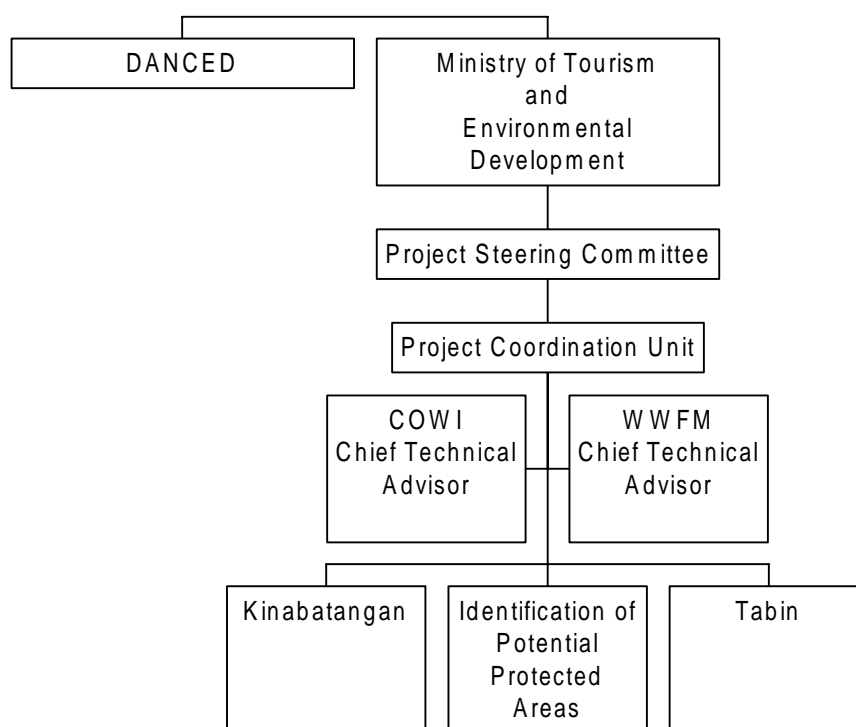


Figure 2 Project Organisation

The inception period was utilised to study and re-organise the Project Document from 1994. This was done through a series of training activities and resulted in the Project Document being split into four documents containing plan of operations for one component each. These plans of operations were founded on the logical framework approach and included descriptions of approach, time schedules and budgets.

The overall project matrix (see page 70, Annex E) was maintained at all times.

The project was, throughout the implementation period, guided by 5 Project Steering Committee meetings and frequent visits by DANCED staff from Kuala Lumpur and the Head Quarters in Copenhagen. Also, the Sabah authorities have at highest political and department level been involved actively in project concerns.

Three separate component completion reports and a financial completion report have been produced parallel to this consolidated report. The consolidated report attempts to

look at the project as a whole with the components being 'Project outputs' and component outputs being 'Project activities'.

3. PROJECT CONTEXT

3.1 ASSUMPTIONS

For the development objective of the project the assumptions listed in the original Project Document were:

- *The Government remains committed to plans of the project.*
- *The Government's biological resource management will be modified according to new knowledge.*

There was no doubt the Government's commitment was genuine throughout the project. The project had access to all relevant information and support from political side was obvious. The only specific problem area apparent during the project period was Lower Kinabatangan where oil palm plantation expansion, approved by government policy, is having negative impacts on biodiversity conservation.

The biological resource management was amended several times, notably with the passing of the Wildlife enactment, the Environmental Conservation Enactment and the creation of a Department of Environmental Conservation.

For the immediate objectives the assumptions were:

- *Full Co-operation on training from the Government of Sabah, and staff vacancies will not remain.*
- *Local schools and villages are willing to use information materials.*
- *Government of Sabah institutions will co-operate closely on data exchange with each other and with the project.*
- *Relevant government organisations willing to discuss information on biodiversity and conservation needs in the coastal zone.*
- *Local people in the coastal zone co-operate with project staff.*

(Project Document 1994)

The project faced no problems in having government staff from many agencies available for training. Federal regulations, however, made it impossible for the implementing agency to fill all staff vacancies. This shortcoming was alleviated by the flexible attitude to Terms of References for all staff concerned and the dedication they showed.

The project has not distributed much information material in rural areas. It has instead held numerous, well attended village meetings and conducted successful trips for rural schools to Tabin.

The project has established several channels of co-operation with other government agencies, which have been willing to support the project with advice, manpower and information. The recent rapid development within digital data storage has brought with it possible high quality data exchanges, but the issue of cost and responsibility is not yet solved, even between government agencies.

The assumptions regarding the coastal zone were not relevant to the present project but remained from earlier draft Project Documents. However, government agencies, the private sector and local communities were at all time eager to participate actively in discussion fora.

Further assumptions for the main outputs are:

- *Staff is available for training.*
- *Planned posting of Wildlife Department staff to Tabin and Kinabatangan will take place.*
- *The Government of Malaysia will undertake basic infrastructure investments.*
- *Wildlife reserves will continue to be managed by the Wildlife Department.*

(Project Document 1994)

On the input level assumption were to be made concerning the identification and deployment of staff and consultants. It was also found also important that equipment can be procured without major delays due to customs clearance etc.

Advisors from World Wide Fund for Nature Malaysia were not identified until after the technical assistance service contract was signed. The subsequent procedures revealed difficulties in finding suitable candidates, especially within the state.

The project faced some initial problems obtaining tax exemption for the project vehicles. These problems were eventually solved but only after the project vehicles had been ordered and sold to others three times. Due to delays fielding the World Wide Fund for Nature Malaysia staff and the accommodating attitude of the COWI staff, this delay did not influence the implementation of the project.

3.2 OPPORTUNITIES FOR STRENGTHENING PROJECT IMPACTS

3.2.1 DIRECT IMPACT

Project impact should be measured as achievement of the objectives.

The four components were different in nature and have addressed the three immediate objectives with different priorities.

The Project Co-ordination Unit activities focused on capacity building, which in itself further leads to better management practises and handling of information.

The Tabin component focused on management of protected areas through capacity building and provision of better information systems and data.

The Kinabatangan and the Identification of Potential Protected Areas components focused on data and information in order to improve management of or secure protected areas.

All the components were successful in their focussed attempts to achieve the various objectives and the project management feels confident these achievements will lead to fulfilment of the overall development objective provided sustainability is ensured.

There is in most projects a built-in rigidity when it comes to choice of outputs and activities. It is part of accountability and to some extent further accentuated by the logical framework approach. The outputs are chosen early in the project life, the type and amount of advisors are determined even long time before project implementation starts.

This is all to ensure the project remains focused on achieving the objectives.

The Sabah Biodiversity Conservation Project has had a fixed set of field activities to implement but were able to select areas for training found appropriate at any particular time. Training under the Project Co-ordination Unit and Tabin components has therefore been in a position to pursue any opportunity to optimise the impact.

It has, however, for the Identification of Potential Protected Areas and Kinabatangan staff often been expressed, that momentum was lost if the project stayed at the predetermined path of providing data and recommendations. Several tempting opportunities presented themselves for actual implementation of recommendations.

Since recommendations often are of political nature and since the Identification of Potential Protected Areas was implemented by an NGO without much counterpart participation, it could have presented a danger for Government priorities, policies and strategies if the NGO staff had embarked on such implementation. Delays of government reaction to project recommendations, however, could be interpreted as a missed opportunity for higher impact.

The project managed to get a good rapport with the Project Steering Committee, which endorsed those changes deemed vital for project impact. The Project Steering Committee was in particular flexible in endorsing proposed changes in the technical assistance composition.

The project management concludes, given the above context, that no opportunity for strengthening of the impact was lost on the side of the project.

3.2.2 LEGISLATIVE STRENGTH FOR ENVIRONMENTAL CONSERVATION

The main overall opportunity to strengthen the impact of the project is that, since this project commenced, three new (State level) laws, relevant to biodiversity conservation, have been passed. The lead agencies for utilising these laws are fortuitously under the purview of Ministry of Culture, Environment and Tourism. The laws are:

3.2.2.1 Cultural Heritage (Conservation) Enactment, 1997

The implementation of the law is overseen by the State Cultural Heritage Council, to which the Permanent Secretary of Ministry of Culture, Environment and Tourism is the secretary,

3.2.2.2 Wildlife Conservation Enactment, 1997

The Enactment allows statutory establishment of Wildlife Sanctuaries and Wildlife Hunting Areas under the management of the Sabah Wildlife Department; and

3.2.2.3 Conservation of Environment Enactment, 1996

Allows the newly established State Department of Environmental Conservation to propose and oversee management of “conservation areas”, irrespective of ownership of that land area.

3.2.3 ESTABLISHMENT OF DEPARTMENT OF ENVIRONMENTAL CONSERVATION

The establishment of the Department of Environmental Conservation in August 1998 also represents a significant opportunity to strengthen the impact of recommendations made under the Project. The Department of Environmental Conservation is potentially in a position to:

- (a) generally monitor and proactively guide land development in several Identification of Potential Protected Areas sites (notably, Crocker Range foothills and Lower Sugut);
- (b) become involved in preparation of a forest management plans for Ulu Padas; and
- (c) Use the new Environmental Conservation Enactment to provide protection to specific sites, especially if other options (e.g. as Forest Reserve or Wildlife Sanctuary) prove to be difficult for reasons of existing private ownership of land.

3.2.4 INPUT TO SUSTAINABLE MANAGEMENT OF COMMERCIAL FOREST RESERVES

Another general opportunity for strengthening impacts of the project work is that the potential for sustainable management of Commercial Forest Reserves was improved through formal adoption by the State government of sustainable forest management

principles, and signing of new long-term forest management licences with ten companies. Project documents could be used as input to long-term forest management plans for Ulu Padas and Lower Sugut. This was, in fact, the intention of the third objective of the Identification of Potential Protected Areas Component: to enhance the capacity of commercial (timber production) Forest Reserves to contribute towards biodiversity conservation in Sabah. The intensive training of the Wildlife Department contributes to this end as it enables the Department co-operate with the stake holders in creating wildlife management plans as required for the forest management plans.

3.2.5 SABAH FOREST DEPARTMENT

Two project sites (Nabawan kerangas forest and Klias peat swamp - mangrove forests) were investigated by a Forest Research Centre team for the project. Consequently, Forestry Department has already expressed interest in proposing these project sites as new (Protection) Forest Reserves. This unplanned but valuable initiative should be supported.

3.2.6 SABAH WILDLIFE DEPARTMENT

A further opportunity to strengthen project impact would be through the interest of the Sabah Wildlife Department in three areas (Lower Sugut, Lower Segama and Padang Taratak in Klias Peninsula). This Department has had some knowledge of and contacts with these areas prior to project work. The project has enhanced knowledge of these sites, especially in relation to the views and socio-economy of nearby residents and to sociological methods in general.

It is noteworthy that the new Wildlife Conservation Enactment, 1997, requires any proposal for a new sanctuary to include evidence of consultation with local communities. The project work should at least provide the basis for further consultation and should be part of the background documentation accompanying Cabinet proposals.

3.3 NATIONAL PRIORITIES

3.3.1 PROJECT IMPACT ON LAND USE PLANNING

Although ostensibly a project geared towards conserving biodiversity, the project studies have also served to elaborate on the valuable functions of the natural areas within the project sites that are frequently overlooked by government agencies in planning. Examples are the studies of both highland and wetland hydrology, soil suitability and studies of fisheries resources. In many areas, the benefits of the ecosystems to the State outweighs their biodiversity value alone, and provides compelling reasons for their protection and wise use. The study findings have to some extent, raised awareness within the government sector of the consequences and economic impacts of environmental mismanagement and inappropriate land use. Flooding, forest fires and soil erosion are some examples of such problems that impose hefty losses to society and the economy. Several of the project reports

document potential causes and effects of land use decisions in the study areas; this provides decision makers an opportunity to weigh the benefits of proposed actions with potential costs.

3.3.2 IMPACT ON ECONOMY

In terms of immediate major national priorities, relating to reviving the overall economy and financial system, project is probably neutral. Despite claims that may be made by some quarters that preserving forest areas for biodiversity curtails “development”, releasing the Project study areas for conventional logging and other extractive activities will produce only unsustainable, short or medium-term money benefits for a minority. Ensuring the integrity of the wetland and montane areas studied, however, does make a significant contribution to the economy although this is not readily converted into market values. The main benefits are the direct use of resources by local residents, and the avoidance of land degradation and damaging downstream impacts that would be costly to reverse.

Implementation of project recommendations will have small negative impacts on timber production capacity and on potential palm oil production (see below) and positive impacts in several other ways (e.g. maintaining water quality and hydro-power production potential). Adoption of Project recommendations overall will have probably a neutral effect on the economic diversification and growth in general.

Several of the Project sites are attractive for tourism, and the Project recommendations would safeguard unique areas that would complement the network of natural areas that draw already international visitors to Sabah. The increased emphasis on domestic tourism in Malaysia in view of the currency crisis may also have a role to play in developing this sector.

However, tourism is usually slow to establish, particularly in communities unfamiliar with this industry. In the immediate future, it would be premature to predict to what extent tourism has the economic potential to replace other forms of land use.

3.3.3 INTERNATIONAL BIODIVERSITY OBLIGATIONS

Malaysia is signatory to the international Convention on Biological Diversity and, in 1998, launched its own National Policy on Biodiversity. This policy contains guiding principles for the conservation of natural ecosystems and the sustainable utilisation of biological diversity for the benefits of all sectors of society. Three constraints on rapid implementation of this national policy are:

- (a) There are no government agencies established specifically for biodiversity conservation (the various components of biodiversity come under the purview of more traditional sectors of forestry, wildlife, parks, fisheries etc.). This means that no single government agency below Ministry level is able to take the lead role in implementation of the policy.
- (b) Most basic elements of biodiversity conservation, notably forests and land allocation, come under State control, not Federal.
- (c) The most fundamental determinant of long-term “in situ” conservation of terrestrial biodiversity consists of making specific recommendations to State

governments for conservation and management of specific forest land areas, yet few if any agencies are involved in preparing such proposals.

Thus, Project findings represent a very timely and significant means to assist in the implementation of the National Policy on Biodiversity at State level in Sabah. At a more general level, it may be hoped that the initiative of the Project in generating proposals for specific forest areas will point the way in other States to the urgent need for similar processes to be carried out.

3.4 PROJECT IMPACTS AND RELEVANCE IN RELATION TO SECTORAL PRIORITIES

3.4.1 RELEVANCE TO SUSTAINABLE FOREST MANAGEMENT

Malaysia has made a commitment to implementing Sustainable Forest Management by the year 2000. According to principles, which are increasingly accepted internationally, the concept of sustainable forest management involves, conserving natural forest functions, biodiversity, and consultation with local communities in drawing up forest management plans for particular areas.

Project gave attention to both these issues in relation to Ulu Padas and also Lower Sugut. Project activities and recommendations are in accordance with and support sustainable forest management, as envisaged by the State Government, professional foresters and at least part of the international wood products trade. Dissent from this view may come from parts of the logging industry and associated beneficiaries accustomed to unsustainable timber mining and large windfall profits. This latter part of the timber industry carries on as usual, largely because there are still insufficient forces putting pressure on them to change. Implementation of Project recommendations could be used to contribute additional pressure in the nascent process of extinguishing the timber mining mentality.

At a more general level, and partly based on the initiative of the Project it has been accepted that preparation of forest management plans can benefit society at large by receiving input from agencies or projects other than forestry agencies and logging concession-holders alone. The state initiative of introducing "Forest Management Units", each of which are required to produce internationally acceptable management plans, is a proof of this. In the preparation of management plans, environmental, wildlife and water quality issues have to be taken into consideration. Wildlife officers have already been involved in preparing such plans and the new state enactment on environmental conservation empowers the director of the Department of Environmental Conservation to screen any land development issue.

3.4.2 POSSIBLE BENEFITS TO TOURISM SECTOR

Implementation of most of the Project recommendations can serve to benefit the tourism industry, which is an important economic sector in Sabah, in terms of retaining areas that have potential either now or in the future. Recommendations have also been made on how local communities could become involved in this sector with government support. However, it should be cautioned that tourism is a complex,

difficult and risky service business that may be unsuitable for rural communities looking to escape from a declining subsistence economy. In the case of Project, some of the sites with long-term tourism potential were damaged to some extent by logging or fire.

Tourism considerations have been an integral part of all project activities. The Kinabatangan studies included a separate tourism study and tourism in Tabin has during the course of the project been partly privatised. The Tabin tourism activities will greatly benefit from the project's activities in Tabin even though only few activities were made specifically for tourism development. The increased security, reserve protection, better awareness and training of staff, nature trails, an educational exhibition.

Even the availability of improved information systems will benefit the tourism activities. Maps are available and the Wildlife Department will be in a position to extend training to future nature guides.

3.4.3 STEMMING SPECIES EXTINCTION ARISING FROM OIL PALM EXTENSION

Project recommendations for most sites investigated propose conserving forest on land, which potentially could be used for oil palm cultivation. Oil palm represents the second major land use after forest, in Sabah and in Malaysia as a whole. Expansion is encouraged at Federal and State level, as export profits are high in relation to production costs (in money terms). Conflict may arise between the conservation option and oil palm expansion at several Project sites. Forest conservation at all Project sites will be beneficial not only for biodiversity conservation but also for one or more of water quality protection, flood mitigation, fisheries protection and tourism.

If all Project sites are protected, this would remove less than 10,000 hectares of land (some very marginal) from potential oil palm cultivation, in comparison to at least 1 million hectares which is expected to have been planted in Sabah by year 2000. In other words, conserving all Project sites and their associated benefits would result in less than 1% less palm oil than the maximum projected.

The 120,000 hectares of forest in Tabin Wildlife Reserve have been sought for by prospective planters and logging concessionaires but the State Government has been steadfast in its protection of the area. The reserve is the largest of its kind in Sabah and the only area that can hold the wide variety of animal species actively translocated there. The project has, through the Wildlife Department and in collaboration with the local university carried out extensive research programmes increasing the knowledge of species distributions and ecology. It has also in collaboration with the Sepilok Orang Utan Rehabilitation Centre translocated several animals threatened with extinction into the Tabin Wildlife Reserve.

Of these, the Asian Rhinoceros is the most prominent species. With only few individuals surviving, the few specimens in captivity represent one of the Wildlife Department's most valuable assets. To safeguard them from fatal diseases, to of these animals, which participate in a breeding program, will be translocated into project build facilities in Tabin on December 10, 1998.

Likewise, numerous plant species, hitherto unknown in Sabah, have been found during the activities under the Identification of Potential Protected Areas component. The specimens collected will be included in state collections and their discovery has prompted the authorities to include several conservation activities in their considerations.

3.5 PROJECT IMPACTS AND RELEVANCE IN RELATION TO REGIONAL PRIORITIES

3.5.1 AWARENESS OF BIODIVERSITY AND ENVIRONMENTAL CONSERVATION

There appears to have been some impact in terms of heightening awareness at District level of the need to incorporate environmental planning in development. This may be most obvious in Kinabatangan, Beaufort and Sipitang Districts, since four Project sites, including the Tabin Wildlife Reserve, are in or overlap with these Districts. However, there must be sustained follow-up to Project recommendations if this impact is to be more than short-lived.

3.5.2 ENDORSEMENT AND SUPPORT FOR WATER CATCHMENT MANAGEMENT

A regional priority in south-western Sabah is the preparation and implementation of an integrated water catchment management plan for the Padas River (the second largest river system in Sabah). Indeed, the State Government, through the Department of Irrigation and Drainage, has requested DANCED assistance to prepare such a plan. Three Project study areas (Ulu Padas, Klias Peninsula and Crocker Range foothills) lie within the Padas River catchment. Information gained and recommendations made under the project are relevant to development of the proposed catchment management plan, and project staff have outlined important areas for inclusion in the plan during the inception and design phase of the proposed catchment management study. The Project recommendations have already identified that forest protection in large parts of the Padas catchment is of greater significance for hydrological reasons than for biodiversity conservation reasons alone.

3.5.3 REGIONAL PLANNING FOR CONSERVING ORIGINAL ECOSYSTEMS

In two regions of Sabah where Project recommendations have been made (Lower Sugut and Nabawan), it is anticipated that there will be very large expansion of oil palm plantations (commercial planting of this crop commenced in these regions only after Project work commenced). Project recommendations have prompted the state government to consider regional environmental impact assessments and other environmental planning procedures. This will help to ensure that most of the original natural biodiversity found in these regions will be conserved and avoid distinction. This sign of project sustainability is further elaborated in Chapter 7, page 42.

Interestingly, support for implementing Project recommendations in these two regions has come from two other directions during the course of Project work. Firstly, there is increasing realisation that conventional, legally required, site-based or project-based environmental impact assessments are often ineffective at preventing environmental

degradation. Instead, many commentators suggest that regional or sectoral environmental impact assessments would be more effective.

Thus, viewing the Project work as the biodiversity component of a hypothetical regional environmental impact assessment, then conservation of the sites proposed in Project may be more effective than imposing a conventional project-based environmental impact assessment on every project proposal. Secondly, the view of the Project workshop on “Forests in Plantations” was that efforts to promote forest conservation in regions with existing large plantations will have limited success. The view of experienced oil plantation advisers was that conservation areas should be identified within a region not yet developed (such as Sugut and Nabawan), and imposed by government before plantation development commences.

3.5.4 PROJECT RELEVANCE

As the impact analysis above shows the project has had a significant relevance at all levels and for virtually all sectors involved in the utilisation of the open land. The question of relevance concerns priorities and subsequent participation and sustainability. The endeavour of the project will only be relevant if the spirit and activities of the project continue. But sometimes, relevance only becomes obvious to the participants after awareness has been risen.

The political awareness has been ensured together with popular participation, but the present economic down turn may pose a threat. The ceiling for establishment of new government posts will place unfair burdens on the present staff, as there will be an increased demand for “productive” land. Oil palm planting is a profitable export crop and there is an obligation for planters to utilise their lands fully.

This will lead to economically productive but monotonous areas with little biodiversity and even loss of presently protected areas if the long sighted political will is not mobilised or maintained.

3.6 TARGET GROUP PRIORITIES

3.6.1 PROJECT IMPACT

The target group of the Sabah Biodiversity Conservation Project was primarily decision makers and officers within the services of the Government of Sabah and to a lesser extent the local or general population.

The project furnished training, exposure and improved information to the Government staff and thereby to decision makers. Project impact by these activities is determined by whether the choice, level and approach of these activities were appropriate. A detailed list is included in Annex H, List of Training Activities. Participants have included all staff members of the Wildlife Department and the Environmental Development Division (Department of Environmental Conservation) in addition to 100 members of the private sector, 50 village representatives. Other DANCED projects throughout Malaysia were also invited to send counterpart staff to selected courses.

The activities were determined only after careful analysis of need and capacity. If the need was there, but the capacity was found insufficient, training would precede the activity. The need might be there, but unnoticed by the target staff. In these cases, internal awareness and creation of attitude would precede the activities.

The training provided by the project has consequently had a very significant impact on the target agencies. Lower rank staff have been lifted to a level where they feel appreciated and officers have been given wider horizons, leading to a higher level of initiative, self improvement and thereby job satisfaction.

The project management is not in doubt the project has had a significant impact on the target group although there still is much room for further training.

Likewise, the training has enabled the staff to take advantage of the improved access to data and information on biodiversity and natural resources management. More than 120 reports were written and briefings were held with staff of counterpart agencies, other government institutions, district offices and whole village populations. Annex F includes a complete list of reports.

3.6.2 PROJECT RELEVANCE

Sabah Biodiversity Conservation Project has strong relevance to Department of Environmental Conservation in (a) having provided training to Environmental Development Division staff now “absorbed” into the new Department, and (b) providing some specific recommendations (under Identification of Potential Protected Areas) for at least three sites (Crocker Range foothills, Lower Sugut and Ulu Padas) which would benefit from implementation of measures possible under the Conservation of Environment Enactment.

4. PROJECT OUTPUTS

With the objectives given, the initial planning process included selection of outputs in accordance with the logical framework approach. Some indications were given in the original Project Document. These and other ideas were thoroughly discussed and refined in the inception phase. They were again further elaborated at each Project Steering Committee meeting.

It could be argued whether the selected outputs were the optimal choices. However, the project management was confident that the choices made were correct. This included choice of sites and training issues.

The purpose of the logical framework approach was to ensure project activities remain focused on achievement of the project objectives. The approach proved efficient as several interesting options were presented to the project management.

4.1.1 PROJECT CO-ORDINATION UNIT

The Project Co-ordination Unit has had activities that lead to following output:

- Human Resource Development for the Environmental Development Division (Department of Environmental Conservation);
- Human Resource Development for the Wildlife Department;
- Awareness Raising for High Level Decision Makers;
- Awareness Raising for Local Decision Makers;
- Improved Natural Resources Management.

The outputs are included in the monitoring forms in Annex B.

All outputs have been completed with the exception of the decision maker awareness activities, which are due for completion by December the 10th, 1998.

The COWI technical assistance advisors have issued technical reports detailing the training approach used and the Project Co-ordinator has produced concept papers and training plans for all activities.

4.1.2 TABIN

Outputs planned for the Tabin component have been:

- **Communication and other equipment**
Field and office equipment have been purchased and a communication tower installed.
- **Track-network (Road)**
23 km old logging road has been upgraded and an environmental impact assessment has been produced as part of a training program.
- **Aerial reconnaissance**
The Tabin Wildlife Reserve has been systematically over-flown and several incidences of intrusions have been reported. The patrols have been utilised to habitat studies.
- **Fire precautions**
A fire prevention course has been conducted by the Lahad Datu Fire Brigade.
- **Co-operation with other parties**
An interdepartmental management committee has been established for the Tabin Wildlife Reserve.
- **Footpath/hiking trails**
A network for educational walks near the Tabin station have been cleared, improved and marked.
- **Health Emergencies**
All staff of the Tabin Wildlife Reserve have passed a Red Crescent first aid course
- **Biodiversity Monitoring I**
Extensive mapping, survey and training programs have been conducted for officers and rangers from all Wildlife Department stations.
In co-operation with Sepilok 14 elephants have been translocated and two rhinos are to be translocated on December 10, 1998. The rhinos will occupy the holding facilities built by the project in Tabin.
- **Biodiversity II : Reserve Staff**
As above
- **Biodiversity III : Distributional Inventory**
As Above
- **Socio Economic Survey**
Surveys in all villages adjacent to Tabin have been carried out to determine the relationship between the Tabin Wildlife Reserve and the villagers.

- **Community Activities**
Two villagers were selected for support. They have been furnished with generators and a school is being built.
- **Environmental Education**
A draft state strategy has been formulated and school programs planned and implemented in Tabin.
- **Training**
Numerous training activities have been carried out.

All outputs are completed with the exception of the community activities, which are due for completion by December the 10, 1998.

4.1.3 IDENTIFICATION OF POTENTIAL PROTECTED AREAS

The Identification of Potential Protected Areas component was planned to produce survey reports and conservation recommendations from:

- Ulu Padas
- Lower Sugut
- Klias
- Nabawan
- Crocker Range
- Lower Segama (= Kulamba – Tabin Wildlife Reserve corridor)
- Commercial Forest Areas
- Plantations (Oil Palm)

Work in Ulu Padas, Lower Sugut, Klias, Nabawan, Lower Segama and the plantations were completed as planned.

The work in the Crocker Range was hampered by forest fires and therefore nor carried out as detailed as planned.

The work with commercial forest areas was abandoned due to time constraints and a new situation as the Forest Management Unit system was introduced.

4.1.4 KINABATANGAN

The Kinabatangan component was completed in 1996 when a comprehensive report was submitted to the Project Steering Committee and accepted. The report included

- A tourism Study;
- A Fisheries Study;
- A Socio-economic Study;
- A Botanical Study.

5. PROJECT INPUTS

5.1 SUMMARY OF DANCED INPUTS

DANCED's input to the Sabah Biodiversity Conservation Project has been covering three main items:

1. Technical assistance cost;
2. Project operation cost (field cost)
3. Reimbursement salary cost of three Project Co-ordination Unit staff for 2 years

5.2 TECHNICAL ASSISTANCE

The technical assistance was originally planned to be provided by one, Danish main contractor with the proviso that that contractor through a sub-consultancy arrangement should engage World Wide Fund for Nature Malaysia for certain services. The main contractor, who after tender procedure in Denmark was COWI, Consulting Engineers and Planners AS, should assume full technical and financial responsibility for all technical assistance input. For various reasons, this arrangement was not acceptable to the World Wide Fund for Nature Malaysia who declined to sign a conventional FIDIC sub-consultancy contract with COWI. The final solution became a project with two technical assistance providers:

- COWI providing technical assistance for the Project Co-ordination Unit and Tabin components through a contract with DANCED and
- World Wide Fund for Nature Malaysia providing technical assistance to the Kinabatangan and Identification of Potential Protected Areas components through a contract with the then Ministry of Tourism and Environmental Development. This contract was reimbursable to DANCED through a direct arrangement between DANCED and the Ministry of Tourism and Environmental Development.

All advisors have filled monthly timesheets, which have been submitted to the Project Co-ordination Unit.

5.2.1 COWI

The table below shows time consumption by COWI technical assistance advisors as envisaged ultimo December 1998

Table 1 COWI Technical Assistance Consumption (Man-months)

		Contract Obligation	Actual Consumption
Chief Technical Advisor	E.O.Kofod	40	40
Administration Advisor	J. Simpson	2	2
Training Advisor Including Tabin	Wilfred Tangau/ Julia Majail	11	11
Quality Assurance Audit	JM Kieler	1	1
HQ Back-up	JT Pedersen	3	3
World Wide Fund For Nature (Denmark)		3	3
Protected Area Management	R. Petocz/ J.Durinck	13	13
Int. Sociologist	Claus Rebien	1	1
Community Development Expert	Julia Majail	5	5
Total COWI fees		79	79

5.2.2 WORLD WIDE FUND FOR NATURE MALAYSIA

The tables below shows time consumption by World Wide Fund for Nature Malaysia technical assistance advisors as recorded ultimo December 1998.

Table 2 WWFM Technical Assistance, Identification of Potential Protected Areas (Man months)

Allocation as per Project Budget (totalling 46 man months):-

- (i) Wildlife Biologists (1man months) (iv) Economist (12 man months)
(ii) Botanists (18 man months) (v) Unallocated (1 man months)
(iii) Sociologist (14 man months)

SPECIALISATION	NAMES	MAN MONTHS REVISION	
		Original	Revised Approved
Supervision/management support		3	3
Chief Technical Adviser	Dr. Junaidi Payne	31	31
Biologists	Justine Vaz & Flory Siambun	36	36
Secretary	Maria Fung	36	36
		0	0
Wildlife Biologist	Rajanathan Rajaratnam	1	2
Botanist	Reza Azmi	0	2
Botanist	Anthea Phillipps	0	5
Botanist	Anthony Lamb	18	1
Botanist	FRC (Forest Research Centre)	0	3
Sociologist/Anthropologist	Paul Towell	0	2.5
Sociologist/Anthropologist	Dr. Lye Tuck Po	14	8
Sociologist/Anthropologist	Suriani Suratnam	0	2
Economist	Dr. Jamal Othman	12	3.5
Hydrologist	Dr. Anthony Greer	0	2
Hydrologist	Dr. Waidi Sinun	0	1
Hydrologist	Dr. G. Balamurugan	0	1
Soil Scientist	Dr. S. Paramanathan	0	2
Development Expert	Grace Wong	0	4
Forest In Plantations Workshop	contribution to addtl. exp. incurred above allocation	0	0.25
Wildlife Biologist	Dr. Geoffrey Davison	0	0.75
Technical Assistant	Shahril Kamarulzaman	0	1.5
Fisheries Specialist	Mohd. Saini b. Suliansa	0	2
Photographer	Oon Swee Hock	0	0.5
IPPA Information Leaflets/Posters	Justine Vaz	0	1
Chief Technical Adviser	Dr. Junaidi Payne	0	1
Unallocated		1	0
	TOTAL:	152	152

Table 3 WWFM Technical Assistance, Kinabatangan (Man months)

SPECIALISATION	NAMES	MAN MONTHS	
		Original Allocation	Actual Used
Chief Technical Advisor	Junaidi Payne	2	2
Biologist	Reza Azmi	6	7
Tourism Specialist	Pamela Fletcher	6	7
Economist	Dennis Goonting	2	2
Freshwater Fisheries Management Specialist	Muhamad Saini Suliansa	2	2
HQ Back-up		0.5	0.5
Other		0.21	0
TOTAL:		18.71	20.5

5.3 LOCAL STAFF

Salaries for three Project Co-ordination Unit staff: the Project Co-ordinator, the secretary and the accountant has been reimbursed by DANCED for the first two years of the project. Salaries used corresponded to normal, local salaries.

5.4 MATERIALS AND EQUIPMENT

The project has invested in

1. 4 vehicles (Toyota Land Cruiser II)
2. 23 km road in Tabin;
3. One rhino holding facility with guard house in Tabin;
4. Office and computer equipment for the Project Co-ordination Unit office;
5. Office and computer equipment for the Identification of Potential Protected Areas component;
6. Office and computer equipment at the Wildlife Department Head Quarters and Tabin;
7. Tools and educational equipment, Tabin;
8. One school in Kampong Parit;
9. Two generators in Dagat and Tidong villages;
10. One communication tower in Tabin.

Materials and equipment were procured locally in accordance with plans and schedules. All expenditures were within budgets. All materials and equipment have been brought to the planned use.

There have been no unnecessary purchases.

5.5 SUMMARY OF MALAYSIAN INPUTS

5.5.1 FACILITIES

The Government of Sabah has at all times provided furnished, good quality office space for all advisors attached to the Project. The Project Co-ordination Unit, however, has been located outside the ministry offices, whereby the advisors lacked the daily contact with the Ministry and Environmental Development Division staff, deemed so important for successful co-operation beyond strict project work. Also, the national counterparts and administrative support within the Project Co-ordination Unit were not exposed to daily government routines and were in many ways left out of ministry life.

The Ministry has at all times been aware of these conditions and has eagerly tried to solve the problem, but without being successful till August 1998, where the Project Co-ordination Unit staff were physically absorbed into the newly created Department of Environmental Conservation.

The advisors attached to Tabin and Wildlife Department has always had access to workspace in the Department or in the Tabin Wildlife Reserve Station. A small house was rented from the Wildlife Department for accommodation of advisory staff in Tabin Wildlife Reserve.

Advisors attached to the Identification of Potential Protected Areas component have been housed within the Environmental Development Division. These advisors were there already before the onset of the Sabah Biodiversity Conservation Project as they on behalf of World Wide Fund for Nature Malaysia carried out other tasks for the Ministry of Tourism and Environmental Development.

Table 4 Counterpart Staff

Post	Organisation	Part Time/Full Time
Project Director	Environmental Development Division now known as Environmental Conservation Department	Part Time
Project Co-ordinator	Ministry of Tourism & Environmental Development	Full Time
Tabin Component Team Leader	Wildlife Department	Part Time
Identification of Potential Protected Areas Component Team Leader	Environmental Development Division	Part Time
Kinabatangan Component Team Leader	Wildlife Department	Part Time
Project Secretary	Ministry of Tourism & Environmental Development	Full Time
Accounting Officer	Ministry of Tourism & Environmental Development	Full Time

In addition, virtually all staff of the Wildlife Department has, one way or the other, been involved in field implementation of surveys, monitoring or planning exercises.

In particular, the Permanent Secretary of the Ministry of Tourism and Environmental Development (now Ministry of Culture, Environment and Tourism), the Director and the Deputy Director of the Wildlife Department as well as the newly appointed Director of the Department of Environmental Conservation have taken very active part in project management.

Likewise, two consecutive Chief Ministers and three consecutive Ministers of the Ministry of Tourism and Environmental Development / Ministry of Culture, Environment and Tourism have taken an active interest in the project and the advisors have had an unhindered access to these Ministers.

Government staff in particular from

- Wildlife Department
- Environmental Development Division
- Forestry Department
- Sabah Parks
- Natural Resources Office
- Draining and Irrigation Department
- Department of Town and Country Planning

have been frequent participants at Project sponsored training activities together with staff from the Sabah Foundation, NGOs and private institutions.

Some shortage of counterpart input has been faced by the Identification of Potential Protected Areas component.

5.6 DEVIATIONS

With the exception of the technical assistance for the Identification of Potential Protected Areas component and the contractual rearrangement for technical assistance, there have been no significant deviations from the amount, type and utilisation of DANCED input.

The contractual rearrangements have been described in several sections of this report and the reallocation of technical assistance man months for the Identification of Potential Protected Areas component is included in Table 2 above.

Advisors from COWI have been changed to other persons either when local advisors became unavailable or at the request of the implementing agency.

All changes in advisory input from World Wide Fund for Nature Malaysia have been approved in advance by the Permanent Secretary of the Ministry of Tourism and Environmental Development (Ministry of Culture, Environment and Tourism). Advisory input from COWI has been approved by DANCED, Kuala Lumpur and all relevant local authorities.

6. FINANCIAL STATEMENT

The tables in Annex C list details of the project's use of funds.

The overall picture is one of focused implementation within given budget headings. The tables below show how priorities have been kept throughout the project.

The original Project Document listed an outline budget, which was detailed during the inception phase. The budgets were linked to the accounting system and to actual field activities. The computerisation of the project administration and management enabled project staff constantly to update budgets, thus reporting to the Project Steering Committee budget adjustments reflecting the real situation. The project has therefore every six months received adjustment approvals.

Adjustments have, however been minimal.

The rate of exchange between the Ringgit and the Kroner was originally 2.4 Kroner to the Ringgit, later moving to 2.73 before it dropped to the present 1.7. This had the effect of the project once preparing for an emergency adjustment as the rate went up. In the end, the project has made some substantial savings on the rate of exchange as it maintained its focus on the Ringgit budgets.

A separate financial completion report has been submitted November 1998. This report details these savings.

Table 5 Operation Cost, Project Co-ordination Unit

Budget Line	Item	Original Budget	Consumption	Orig Weight %	Planned Weight %
5 01 99	Office establishment and administration	184,654	160,958	33	29
5 02 99	Environmental Development Div. Development & training	31,800	62,403	6	11
5 03 99	Wildlife Department Development and training	31,300	26,909	6	5
5 04 99	Environmental Education: H/L	47,950	41,844	9	8
5 05 99	Environmental Education : Local	60,250	65,918	11	12
5 06 99	Natural Resources Management	40,150	18,604	7	3
5 07 99	Staff Salaries	110,000	110,000	20	20
5 08 99	M&E Sessions	11,500	11,500	2	2
5 09 99	Information material	16,000	10,030	3	2
5 90 99	Contingencies (Unspent)	19,706	45,144	4	8
5 99 99	COMPONENT TOTAL	553,310	553,310	100	100

Table 6 Operation Cost, Tabin

Account			Item	Original Budget	Consumption	Original Weight %	Planned Weight %
8	2	99	Communication and other equipment	117,384.00	123,847.00	8	9
8	3	99	Track-network (Road)	618,000.00	587,718.47	43	41
8	8	99	Aerial reconnaissance	78,880.00	58,208.65	5	4
8	11	99	Fireprecautions	50,000.00	1,770.00	3	0.1
8	12	99	Co-operation with other parties	6,500.00	1,020.00	0.4	0.1
8	15	99	Footpath/hiking trails	34,560.00	35,000.00	2	2
8	20	99	Health Emergencies	3,350.00	4,448.60	0.2	0.3
8	22	99	Biodiversity Monitoring I	240,790.00	384,316.64	17	26
8	23	99	Biodiversity II : Res Staff	35,420.00	1,848.60	2	0.1
8	24	99	Biodiversity III : Distributional Inventory	3,000.00	14,130.18	0	1
8	25	99	Socio Economic Survey	10,500.00	4,799.20	1	0.3
8	26	99	Community Activities	125,000.00	125,000.00	9	9
8	27	99	Environmental Education	16,299.00	46,923.70	1	3
8	29	99	Training	78,000.00	61,868.96	5	4
8	90	99	Contingencies (Unspent)	33,217.00		2	
8	99	99	Component Total:	1,450,900.00	1,450,900.00	100	100

Table 7 Operation Cost, Identification of Potential Protected Areas

Account	Item	Total DKK	Nov-98	Orig. weight	Planned Weight
7 01	99 Ulu Padas/ Long Pasia	31,895	38,919	5	6
7 02	99 Nabawan	31,895	12,394	5	2
7 03	99 Lower Sugut	31,895	28,733	5	5
7 04	99 Crocker Range Foothills.	46,125	14,165	7	2
7 05	99 Estate Surveys	15,500	30,760	3	5
7 06	99 Klias Peninsula	9,120	19,216	1	3
7 07	99 Commercial Forest Reserves				
7 08	99 Training	60,000	5,575	10	1
7 09	99 Final Workshop	18,900		3	
7 10	99 Office Estab. and Running	300,919	230,542	49	37
7 90	99 Contingencies (Unspent)	60,550	239,697	10	39
7 99	99 Component Total:	619,999	619,999	100	100

Table 8 Operation Cost, Kinabatangan

Budget Line	Item	Original Budget	Consumption	Orig Weight %	Planned Weight %
	Field Cost	93,281	46,338	95	47
	Contingencies (Unspent)	5,100	52043	5	53
5 99 99	COMPONENT TOTAL	98,381	98,381	100	100

7. PROJECT SUSTAINABILITY

7.1 CONTINUED DELIVERY OF BENEFITS

The benefits of the Sabah Biodiversity Conservation Project are mainly within institutional capacity, i.e. training and availability of information and techniques.

If a person as well as his peers are equally trained, social expectations will ensure continued delivery of benefits. Where such delivery fails is when the trained is a minority that is not able to spread his newly gained knowledge.

The capacity building delivered from the Sabah Biodiversity Conservation Project has reached the stage, where the participants do not remember from where the knowledge came. They just have it. Therein lies sustainability.

7.2 INSTITUTIONAL CAPACITY

The attitude and institutional set-up of the ministry implementing the Sabah Biodiversity Conservation Project has changed over the period of the project. Government focus on the conservation of biodiversity has likewise been increased.

These factors lead to an improved support, politically if not financial, to the activities of the environmental conservation sector. At the same time, there has been a move in the public and the media from being almost ignorant to being actively involved in environmental issues. This leads to an increased pressure on the government agencies and to co-operation between the government and NGOs.

Institutional linkages have been established by the project benefiting all parties. There is, however, always a risk that these linkages are based on personal acquaintances, which must be re-established when essential staff is transferred.

The sustainability of project activities is based on attitudes rather than investments. There should therefore be no financial hindrances to sustainability other than staff shortage.

The Tabin and Project Co-ordination Unit training activities have been careful selecting sustainable techniques and technologies. Each activity has been preceded by an analysis of level of technology possible and the background and potential among the staff that were entrusted with the activities.

Over all, the project management feel confident institutional sustainability is achieved beyond expectation.

7.3 CONTINUED SUPPORT FROM STAKEHOLDERS

This project concerns in general the entire Sabahan population. There are, however, some groups with a more direct interest in the outcomes of the project than others.

Such groups include:

- Government Departments
- Land owners and concessionaires
- The Rural population directly affected by the selection of project sites.

NGOs are in this context taken as important representatives of other stakeholders (members), but are not necessarily themselves stakeholders. They are pressure groups, but do not hold a stake in the environmental problems more than the rest of the public. In fact, their objective should be to become obsolete.

In this view, the NGOs become convenient partners of co-operation representing the general public.

The part of the private sector that makes a living from environmental issues is again only a sub-group representing the general population. This part consists of e.g. environmental impact assessment consultants, consulting NGOs etc.

The completion report for the Identification of Potential Protected Areas activities list a range of individual stakeholders and interested parties, analysing the effect for each of them.

The response from Government departments has been very positive and has even shown the way for the movements of the attitude of the public. The most significant - operation between the Ministry of Culture, Environment and Tourism and the Sabah Environmental Protection Association. This committee has mobilised hundreds of volunteers for large-scale campaigns. The Sabah Biodiversity Conservation Project has been active in providing management support to the Department of Environmental Conservation staff member, managing the committee's activities.

Landowners and concessionaires have in general been more forthcoming than expected. Some have initially had their reservations and some kept it all the way through. Most plantation owners and normal-sized logging concessionaires, however, have been more than interested in the dialogue.

With the increased government focus, the landowners and concessionaires will have to cope with environment conserving measures but with the increased public focus, the resistance will decrease.

The rural populations are difficult to fathom as they on one side complain when the logging companies cause siltation of the rivers, on the other hand complain if the companies do not have jobs for them. Overall, however, there is a growing demand for a return to a healthy environment, water in particular.

7.4 PHYSICAL INFRASTRUCTURE

The Sabah Biodiversity Conservation Project has introduced the use of modern information technology in line with the expressed policies of the Malaysian government. This government introduces similar technology in a wide range of government institutions, wherefore the probability of maintenance and further development of the investment must be deemed good.

There have been made large infrastructure investments in the Tabin component. A road has been rehabilitated; a school and a rhino holding facility have been built.

Maintenance of these constructions is already included in the government budgets for 1999.

8. IMPACT ASSESSMENT

8.1 EFFECTIVENESS IN ACHIEVING OBJECTIVES

Three immediate objectives were defined for the Sabah Biodiversity Conservation Project:

- *Objective 1: To enhance the capacity of the MTED and relevant government agencies in the conservation of biological diversity and management of biological resources.*
- *Objective 2: To strengthen biodiversity conservation and local development on selected sites.*
- *Objective 3: To improve the quality and availability of information on biological diversity and its value and significance to communities.*

(Project Document 1994)

The Project Co-ordination Unit and the three field components placed different priorities on these objectives, complementing each other in achieving the overall set of objectives.

The Project Co-ordination Unit activities were focused on the achievements of objective No one, capacity building and awareness raising. Activities were carefully selected to achieve this and all outputs have been delivered. Government staff propose, plan and implement activities on their own at an improved level compared to the pre-project situation.

The Tabin component also addressed capacity building aspects by a large training and exposure sub-component. This was further accentuated during a study tour for the Wildlife Department to Denmark planned and conducted by the project.

The project has been able to contribute to the formulation of new legislation related to the conservation of biodiversity:

- Cultural Heritage (Conservation) Enactment, 1997.
- Wildlife Conservation Enactment, 1997
- Conservation of Environment Enactment, 1996

Objective No 2 was addressed by the Tabin, the Kinabatangan and the Identification of Potential Protected Areas components in various forms.

Tabin provided management support to a particular area and training support for Wildlife Department Head Quarters and its district offices in planning and management.

The Kinabatangan component was a prime factor for the ongoing gazettement of the Kinabatangan wildlife sanctuary and the Identification of Potential Protected Areas component has provided proposals for gazettement of several new areas.

The Tabin, the Kinabatangan and the Identification of Potential Protected Areas components were instruments in providing essential data on biodiversity from all project areas. The Project Co-ordination Unit provided training and management systems for the storage and analysis of such information.

There is no doubt the present level of achievement of the immediate objectives in the end will contribute to the achievement of the development objective.

8.2 DEVIATIONS

The project felt the benefits of full usage of the logical framework approach during the inception phase and later implementation. It was therefore possible to keep the focus on the achievement of the objectives while from time to time adjusting choice of activities as the project gained experience.

8.3 UNINTENDED IMPACTS

There were no negative, unintended impacts of project activities.

There were some unintended positive results such as:

- Project assistance to the Likas Wetlands
- Active support from the Forest Department in securing new areas for forest reserves
- Wildlife Department officers being able to take unpaid leave to work as consultants for tourism or logging companies establishing Wildlife Management Plans.
- The successful promotion of DANCED and Denmark to large parts of the Sabahan community.

9. RECOMMENDATIONS

9.1 PROJECT EXTENSION

The Sabah Biodiversity Conservation Project has successfully completed the outputs planned to achieve the objectives within the organisational framework within which it operated. The project was aware that the Environmental Development Division was to be transformed into the Department of Environmental Conservation and initiated many training initiatives and provided initial management systems that addressed the needs of the Department.

With the formation of the Department of Environmental Conservation August 1998 the settings of the project changed drastically and the requirements to the project were increased. Requests for changes to project outputs already completed were also necessary. These requests could not be fully honoured within the present project timeframe although attempts were made to do so.

The increased burden on the local counterparts during the transition period made them partly unavailable for project work for some months.

It is on this background, the Department of Environmental Conservation on forwards this request for a 6 months extension of DANCED support and that the project management requests permission to adjust the remaining budgets to accommodate the request. The extension of the project will involve only three months advisory input in addition to operational funds.

The request is detailed as Annex G of this report.

9.2 FOLLOW-UP ACTIVITIES

The project held late 1997 a workshop to determine recommendations for follow up activities for DANCED funding. A paper with the findings was submitted to the Mid Term Review mission, which included it as an appendix to its mission report.

The contents of that paper is included in this report as Annex I.

9.2.1 CAPACITY BUILDING FOR THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

The paper submitted to the Mid Term Review mission included a number of recommendations for continued capacity building of the Department of Environmental Conservation. These recommendations have since been incorporated into a Project Document, which has been approved by all relevant authorities.

9.2.2 CAPACITY BUILDING FOR THE WILDLIFE DEPARTMENT

The Wildlife Department compiled the workshop recommendations into a project concept paper (Project ideas) and submitted this to DANCED through the relevant national authorities. The paper has been rewritten in adherence to the DANCED Project Management Manual – Project Preparation and included as Annex J to this report. The required Terms of Reference for the project preparation stage is included as Annex K. The purpose of this paper is to propose a Project Document be drawn up defining a capacity building project for the Wildlife Department. This project is proposed to have six components:

- Capacity Building For The Wildlife Department Head Quarters And District Offices;
- Assistance To The Establishment Of An Oceanic Section Within The Wildlife Department;
- Support To The Planning Of A Biodiversity Training Centre In Tabin Wildlife Reserve;
- Support To The Establishment And Implementation Of A State Nature Education Strategy;
- Support To The Establishment Of A Management Plan For Kinabatangan Wildlife Sanctuary;
- Support To Surveys and Habitat Management in Tabin Wildlife Reserve.

The recommendations from the project workshop in respect of follow-up work in the Kinabatangan area have been incorporated in the above mentioned concept paper.

9.2.3 IDENTIFICATION OF POTENTIAL PROTECTED AREAS

General

The handling of activities such as those recommended under the Identification of Potential Protected Areas component are envisaged to be continued by the Department of Environmental Conservation and other departments (notably Wildlife Department and Forestry Department) in the future. To some extent this aspect is built into the ‘Capacity Building for the Department of Environmental Conservation’ project.

There are some recommendations specific to the sites investigated under the Identification of Potential Protected Areas component. The most significant of these

recommendations are listed below. The recommendations are in general to follow up on the project work with actual conservation proceedings.

Ulu Padas

For Ulu Padas, the Project recommends:

- Preparation and submission of a Cabinet paper seeking endorsement of essential recommendations made in the project site report.

Klias Peninsular

For the Klias Peninsula, the Project recommends:

Padang Taratak:

- Forward site report to Wildlife Department requesting initiation of the process of establishing a Wildlife Sanctuary.

Bukau Api-api River

- Recommend relevant government agencies the establishment of an extension to Klias Forest Reserve.

Crocker Range Foothills

For the Crocker Range Foothills, the Project recommends:

- Request Department of Environmental Conservation to take up site report recommendations for establishment of “conservation areas” using the Conservation of Environment Enactment.

Lower Sugut

For the Lower Sugut the Project recommends:

- Request Department of Environmental Conservation to take up project site report recommendations for establishment of “conservation areas” using Environmental Conservation Enactment.
- Present a proposal to the State Cultural Heritage Council for establishment of riverine conservation areas.
- Forward site report to Sabah Forestry Department with request to incorporate biodiversity conservation compartment in Paitan-Sugut forest management unit management plan.
- Forward the site report to Paitan-Sugut forest management unit concession-holder with request to incorporate biodiversity conservation compartment in management plan.

Nabawan

For the Nabawan area the Project recommends:

- Request discussion between Sabah Forestry Department, Wildlife Department and Sabah Nature Club secretariat to formulate a strategy for establishment of a Nabawan Kerangas Forest Reserve, to be jointly legislated as a wildlife hunting area; the strategy should include a consultation process with local communities.

- Forward the project site report to relevant agencies named in the report, including District Office, and endorsing the site report recommendations.
- Monitor progress of project recommendations.

Lower Segama (= kulamba – tabin corridor)

For the Lower Segama area the Project recommends:

- Forward the site report to Director of Lands and Surveys Department and Kinabatangan District Office, with suggestion to prioritise allocation of one area (as shown in the site report) for issuance of land titles to residents of the three existing communities.
- Request Wildlife Department to present project proposals to local communities and seek comments, including possible joint management of a wetland conservation area established under the Cultural Heritage (Conservation) Enactment.
- Based on the project site report and feedback from local communities, present a proposal to the State Cultural Heritage Council for establishment of a Lower Segama wetlands conservation area

Estate Surveys

The project recommends:

Regional land use plans to be prepared and endorsed by government for implementation, before oil palm plantation development commences in extensive forest areas (for example, Sugut – Paitan and Keningau – Nabawan). These may be functionally equivalent to regional environmental impact assessments.

9.2.4 KINABATANGAN

The most significant adverse impacts on the Kinabatangan Wildlife Sanctuary and the Kinabatangan wetlands in general come from rapid and widespread expansion of large oil palm plantations, on all soil types, outside the Sanctuary and Forest Reserves. This issue will need to be raised with the highest levels of government, as only changes in land policy will influence the ongoing process of biodiversity loss in this region. This aspect is included in the considerations for the proposed Capacity Building for the Wildlife Department Project.

10. LESSONS LEARNED

10.1 OVERALL LESSONS

The Sabah Biodiversity Conservation Project was successful in completing its scheduled activities and thereby achieving its objectives. It demonstrated a solid approach to project management and training of counterparts where and when deemed needed. It also provided a valuable contribution to the knowledge of biodiversity in Sabah.

This success was based on dedication from all parties involved in the project.

All parties had a vision of the ideal project and were positively focused on achieving this.

For the Tabin and Project Co-ordination Unit success was based on the initial planning activities, where counterpart staff accepted responsibility for project implementation. The training involved was cumbersome but paid off. The result was plans and budgets, entirely made by the counterpart staff. A sense of ownership was developed with the counterpart staff and with it a sense of responsibility for sustainability.

Activities for the Kinabatangan component were ably led by the regional Wildlife Department officer. Since production of the Kinabatangan component report in 1996, at least 7 recommendations have been acted on and another seven are in the process of being taken up.

The Identification of Potential Protected Areas activities focused on provision of data and information from a host of professional fields and from several sites. The success in achieving this was the flexible manner in which the technical assistance input was administered. The team composition was frequently adjusted to cater for needs which were identified during field work. Without this flexibility and these adjustments the pool of valuable information gathered would have been much simpler and not

contributed so much to national and even international knowledge of Sabah's biodiversity.

The success did not come easy.

The scope was wide, arguably too wide.

The institutional set-up was complicated with both state and federal levels of execution and a ministry and two line agencies entrusted with actual implementation. The engagement of two very different technical assistance service providers did not make it easier.

Serious difficulties and delays in funds transfer for part of operational cost presented the ultimate challenge to the management. These difficulties were not easy, at times they seemed impossible, for the Project Director who in himself was a target for training.

The visions – even though they differed substantially – of the Chief Technical Advisors and their organisations were backed by the senior management of the government agencies to the extent they could carry the project forward. Without vision and dedication, at times stubbornness, at times flexibility, nothing will move.

Each success of the project is based on a personal vision and dedication from someone. Extreme care should therefore be exercised in selection of the individuals that for a long period shall form a team for the better or the worse.

It is therefore appreciated that DANCED in its evaluation of tenders focus on the proposed teams. This focus should be emulated by the counterpart organisations.

10.2 CAPACITY BUILDING

If capacity building is the issue, it must include all levels of the hierarchy, i.e. administration, rangers, officers and managers. Management distinguishes itself from administration by being based on decision making. Such decision making is again based on the staff's capabilities for presentation of information and alternatives. Analytical and presentation skills therefore become essential for the management. If it fails, only administration is left.

The lesson to learn is not always only to focus on professional skills, but to increasingly include these other skills and the personal attitudes that support these.

It is recommended, future capacity building projects pay special attention to the skills of analysis and production of analytical reports.

Overall, words would be confidence, personal initiative and team play.

Annex A ASSUMPTIONS MONITORING FORM

Assumptions on which . . .	Comment
<p>Achievement of Immediate Objectives will lead to Development Objective:</p> <ul style="list-style-type: none"> • The Government remains committed to plans of the project. • The Government's biological resource management will be modified according to new knowledge. 	<p>There was no doubt the Government's commitment was genuine throughout the project. The project had access to all relevant information and support from political side was obvious.</p> <p>The biological resource management was amended several times, notably with the passing of the Wildlife enactment, the Environmental Conservation Enactment and the creation of a Department of Environmental Conservation.</p>
<p>Completion of Project Outputs will lead to achievement of Immediate Objectives:</p> <ul style="list-style-type: none"> • Full Co-operation on training from the Government of Sabah, and staff vacancies will not remain. • Local schools and villages are willing to use information materials. • Government of Sabah institutions will co-operate closely on data exchange with each other and with the project. • Relevant government organisations willing to discuss information on biodiversity and conservation needs in the coastal zone. • Local people in the coastal zone co-operate with project staff. 	<p>The project faced no problems in having government staff from many agencies available for training. Federal regulations, however, made it impossible for the implementing agency to fill all staff vacancies. This shortcoming was alleviated by the flexible attitude to Terms of References for all staff concerned and the dedication they showed.</p> <p>The project has not distributed much information material in rural areas. It has instead held numerous, well attended village meetings and conducted successful trips for rural schools to Tabin.</p> <p>The project has established several channels of co-operation with other government agencies, which have been willing to support the project with advice, manpower and information. The recent rapid development within digital data storage has brought with it possible high quality data exchanges, but the issue of cost and responsibility is not yet solved, even between government agencies.</p>
<p>Project Activities will lead to completion of Project Outputs:</p> <ul style="list-style-type: none"> • Staff is available for training. • Planned posting of Wildlife Department staff to Tabin and Kinabatangan will take place. • The Government of Malaysia will undertake basic infrastructure investments. • Wildlife reserves will continue to be managed by the Wildlife Department. 	<p>Staff from several government agencies participated in the project activities. The staff represented senior management as well as junior officers and rangers.</p> <p>The Wildlife Department has established a district office in Kinabatangan with 12 staff. There have been some difficulties in getting additional staff to the Tabin Wildlife Reserve. This made the task difficult but not impossible.</p> <p>The new wildlife legislation strengthens the Wildlife Department's authority over the state's wildlife resources and reserves.</p>

Annex B OUTPUT MONITORING FORM

Table 9 Output, Project Co-ordination Unit

Output	Indicators	Means of Verification	Due Date
1. Human resource development and training plan for the environmental development division	1.1 Significant number of staff have improved capability to take on responsibilities	Trained staff takes innovative and catalytic conservation initiatives. Report exist in project library	Completed
2. Human resource development and training plan for the department of wildlife headquarters	2.1 Significant number of staff have improved capability to take on responsibilities	Trained staff takes innovative and catalytic conservation initiatives. Report exist in project library	Completed
3. Environmental education for high-level decision makers	3.1 Top-level government officials have attended the workshop. 3.2 A number of the workshop participant are making favourable comments on biodiversity in the press 3.3 Positive actions are taken in promoting the importance of governmental posts needed for biodiversity management and conservation.	Report exist in project library There are Newspaper reports Posts in the ministry has been created to handle biodiversity management issue	Completed
4. Environmental education for local decision makers	4.1 The community leaders would have attended the workshop. 4.2 Local community leaders showing strong concern on conservation issue in their communities and in the press 4.3 Environmental educational material would be available	Certificates have been awarded There are Newspaper reports	Completed
5. Natural resource management	5.1 Heads of department have attended the workshops. 5.2 Collaborative programmes conducted by related organisation 5.3 Positive action taken to enhance inter-institutional co-operation	Report exist in project library Database for natural resource management set up in ministry line agencies	Completed

Table 10 Output, Identification of Potential Protected Areas

Output	Indicators	Means of Verification	Due Date
1.Ulu Padas – Site Final Report and Recommendations	1.1 Botanical field work 1.2 Discussions/meetings/feedback from main stakeholders (government agencies, local stakeholders/community) 1.3 Aerial survey 1.4 Workshop feedback 1.5 Background papers (= internal reports produced by specialist advisers)	Report produced and available in Ministry of Culture, Environment and Tourism	Completed
2. Klias Peninsula – Site Final Report and Recommendations	2.1 Botanical field work 2.2 Discussions/meetings/feedback from main stakeholders (government agencies, local stakeholders/community) 2.3 Aerial survey 2.4 Background papers (= internal reports produced by specialist advisers)	Report produced and available in Ministry of Culture, Environment and Tourism	Completed
3. Lower Segama * – Site Final Report and Recommendations (* = Kulamba – Tabin Wildlife Reserve corridor)	3.1 Discussions/meetings/feedback from main stakeholders (government agencies, local stakeholders/community) 3.2 Site visits with MOCET/Wildlife Department representatives 3.3 Background paper (= internal report produced by specialist advisers)	Report produced and available in Ministry of Culture, Environment and Tourism	Completed
4. Crocker Range Foothills – Site Final Report and Recommendations	4.1 Discussions/meetings/feedback from main stakeholders (government agencies, local stakeholders/community) 4.2 Aerial survey 4.3 Background papers (= internal reports produced by specialist advisers)	Report produced and available in Ministry of Culture, Environment and Tourism	Completed
5. Lower Sugut – Site Final Report and Recommendations	5.1 Botanical field work 5.2 Discussions/meetings/feedback from main stakeholders (government agencies, local stakeholders/community) 5.3 Aerial survey 5.4 Workshop feedback	Report produced and available in Ministry of Culture, Environment and Tourism	Completed

Output	Indicators	Means of Verification	Due Date
	5.5 Background papers (= internal reports produced by specialist advisers)		
6. Nabawan – Site Final Report and Recommendations	6.1 Botanical field work 6.2 Discussions/meetings/feedback from main stakeholders (government agencies, local stakeholders/community) 6.3 Aerial survey 6.4 Background papers (= internal reports produced by specialist advisers)	Report produced and available in Ministry of Culture, Environment and Tourism	Completed
7. Forests In Plantations Workshop (9 October 1997) – Report and Recommendations	7.1 Field work 7.2 Discussions/meetings/feedback from main stakeholders (government agencies, plantation management, local stakeholders) 7.3 Workshop feedback	Report produced and available in Ministry of Culture, Environment and Tourism	Completed
8. Recommendations on biodiversity in timber production Forest Reserves	8.1 Discussions with Forestry Department 8.2 Recommendations within site report on Ulu Padas 8.3 Recommendations within site report on Lower Sugut	Reports on Ulu Padas and Lower Sugut	Completed

(Output Identification of Potential Protected Areas continued)

Table 11 Output, Kinabatangan

Output	Indicators	Means of Verification	Due Date
Kinabatangan Multi-disciplinary study Report	1.1 Botanical field work 1.2 Fisheries studies 1.3 Tourism studies 1.4 Local community consultation 1.5 Discussions/meetings/feedback from main stakeholders (government agencies, local stakeholders) 1.6 Aerial survey 1.7 Workshop feedback	Report produced and available in MOCET and Wildlife Department	Completed

Table 12 Outputs, Tabin

Output	Indicators	Means of Verification	Due Date
Telephone Communication Tower	Telephone Communication Tower installed and functioning	A 60 feet iron with antenna and cable is found at Tabin Wildlife Station	Completed
Essential for field, office and workshops provided	Equipment installed and functioning at Tabin Wildlife Station and Sabah Wildlife Headquarters	Equipment can be found at the station and the Sabah Wildlife Department Headquarters	Completed
Established forest road for four wheel and motorbikes facilitating management, monitoring and protection	23 km forest road established	Forest road can be check in the field at Tabin Reserve	Completed
Reserve aerial reconnaissance	Flight records and reports	Audit and report can be checked at the Project Co-ordination Unit	Completed
Fire precaution Training	45 staff trained	Course records and report can be checked with Wildlife Department	Completed
Establishment of Tabin Co-operation Management Committee	Committee established involving relevant local government agencies	Minutes of the meeting which can be checked at Tabin Wildlife Station	Completed. Wildlife Department is continuing any actions proposed
Football/hiking trails established and cleared	7 trails established and cleared of major vegetation	Audit, reports and field checked can be carried out at Tabin Wildlife Reserve	Completed
Improvement of biodiversity monitoring programmes	Periodic large mammal monitoring programs conducted	Research reports and Reports of results of monitoring programs	Completed, but programs is continued by Wildlife Department.
Monitoring programs carried out by reserve staff established	Monitoring programs carried out and staff are actively recording data	Staff and management reports can be checked at Tabin Wildlife Reserve and Wildlife Department Data entered on Tabin Wildlife Reserve dbase Tabin Wildlife Reserve Reports	Completed, but programs is still being continued by Wildlife Department

Scientific species inventory and data compilation established	Species inventories being conducted and recorded by field staff during monitoring Data is compiled on distribution maps	Data maps established at Tabin Wildlife Reserve Updated compilation maps produced Tabin Reserve Manager reports	Completed, but programs is still continued by Wildlife Department
Socio-economic surveyed conducted in adjacent areas	Reporting	Progress reports by TA National can be checked	Completed
Agencies supported to assist communities in small-scale development	Education Department contracted in school development	Progress Reports Visual inspection of a school at Parit Village near Tomanggong	On-going, expected to be completed by third week of December 1998
A survey to identify and assess options for using the reserve for nature excursions and other education purposes	Questionnaires developed and distributed to schools Educational activities in the reserve such as conducted nature walks and nature educational programs to school students Conservation and environmental education programs carried out for local schools with materials provided by Tabin Wildlife Reserve staff	Assessment and evaluation report Visual evidence of materials Progress reports by Tabin Wildlife Reserve staff at the station	Completed, but programs is still be continued by Wildlife Department
Training Wildlife Department. Improvement in institutional and human resources to efficiently and effectively manage the reserve	All Wildlife Department staff received appropriate training Staff functioning in the field according to understand list of duties Reduction of infringements in Tabin Wildlife Reserve Effective team work and esprit de corps Knowledge enhanced and capacity of staff exceeds performance Lines of staff responsibilities clearly defined Reporting, recording and monitoring standardised	9 officers and 70 staff attended specialised training Reports from the Tabin Reserve Manager which can be checked at Tabin Wildlife Reserve Office and Wildlife Department Headquarters TA assessments and reports can be checked Management of the Wildlife Department can be checked	Completed, but several programs will be continued by Wildlife Department.

Annex C FINANCIAL STATEMENT

The table included in this annex compares actual expenditure with original (1996) budgets irrespective budget adjustments have been approved by each Project Steering Committee meeting since then.

The expenditures are all well within acceptable limits from the latest approved budgets.

Technical assistance expenses are not included in this report.

Table 13 Project Financial Statement in Malaysian Ringgit

Budget Line	Description	A Budgeted Amount	B Total in Previous Periods	C Expendit. in Current Period	D Future Commit- ments	A-B-C-D Balance Remaining	% Re- maining
Staff Fees							
	1.COWI						
	2.World Wide Fund for Nature Malaysia						
	Sub-total						
Staff Costs							
	1.COWI						
	2.World Wide Fund for Nature Malaysia						
	Sub-total						
Other Costs							
	1.Project Co- ordination Unit	294,654	239,986		20,000	34,668	12
	2. Tabin	990,824	836,606		20,010	158,440	16
	3. Kinabatangan	93,281	46,338			46,943	50
	6. Identification of Potential Protected Areas	499,449	374,728		16,000	108,721	22
	Sub-total	1,878,208	1,497,658		16,000	348,772	18
Training							
	1.Project Co- ordination Unit	238,950	162,114		70,439	6,397	3
	2. Tabin	426,859	393,137		53,571	-19,849	-5
	3. Kinabatangan	0	0		0	0	0
	6. Identification of Potential Protected Areas	60,000	5,575		25,000	29,425	49
	Sub-total	725,809	560,826	0	149,010	15,973	2
Total		2,604,017	2,058,484	0	165,010	364,745	14
Contingency		118,573				118,573	100
Grand Total (incl contingency)		2,722,590	2,058,484	0	165,010	483,318	18

Annex D PROCUREMENT SUMMARY

Table 14 Procurement by Subject and Type of Activity

Area of Activity	Percent of Total Budget	Weighting (%) by Type of Activity			
		Institution/ Capacity Building	Aware- ness Raising	Environ- mental Investment	Demon- stration Projects
Urban/Industry	100	87	2	11	
Biodiversity					
Forestry					
Coastal Zone Management.					
Water					
Energy					
Agriculture					
Total	100%				

Table 15 Procurement by Sector and Type of Supplier

Sector/Type of Supplier	Denmark	Local	Other	Total
Procurement by Sector (in Percent of Project Budget)				
Industry				
Professional/consultancy	44	19		63
Research/development				
Education				
Other		37		37
Total, all sectors				100%
Procurement by Type of Supplier (in Percent of Project Budget)				
Public organisation				
Private company	44			44
Private, non-profit agency				
NGO		19		19
Total, all suppliers		37		37
Procurement by Extent (Percent) Tied/Untied to Indicated Country				100%

Table 16 Investments, Identification of Potential Protected Areas

Invest No	item Description	Quantity	Unit Price	Total MYR	Remark
1	Kodak Slide Projector-1000 TF	1	1990	1990	ok
2	standard Table metal	2	430	860	ok
3	4 drawer filing cabinet	1	320	320	ok
4	Secretary/computer chair	1	220	220	ok
5	2-drawer filing cabinet	1	260	260	ok
6	Metal folding chair	3	26.9	80.7	ok
7	Filing cabinet(book shelves)	2	180	360	ok
8	Slide projector carousel try	1	85	85	ok
9	Acer Antra 500(P200) with MMx	1	4788	4788	ok
10	HP Laser jet Printer	1	1500	1500	ok
11	GPS set(Magellan 4000XL)	1	1525	1525	ok
12	GPS set(Magellan 4000XL)	1	1500	2500	ok
13	canvas	2			ok
Grand Total				14,488.70	

Table 17 Investments, Tabin

invest No.	Item Description	Quantity	Unit Price	Total MYR	Remarks
1	Trimble English Handheld GPS	2	2500	5000	ok
2	High Pressure Cleaner	2	900	1800	ok
3	Mini Air Compressor 1.5HP	1	700	700	ok
4	Hand Tools	1	70	70	ok
5	Wire Extender	1	75	75	ok
6	Wood Working tools	1	100	100	ok
7	AEG electronic drill	1	380	380	ok
8	AC welding transformer	1	700	700	ok
9	14' cut off machine	1	600	600	ok
10	water pump	2	850	1700	ok
11	"Kinki" spray gun	2	200	400	ok
12	Battery charger	1	350	350	ok
13	3 ton chain block	2	280	560	ok
14	Level Chain block 1/2 ton	2	250	500	ok
15	Lawn mover 24"	1	1300	1300	ok
16	PowerMac6100/8-Colour	1	5688	5688	ok
17	Colour printer	1	1284	1284	ok
18	Power stabilizer	1	150	150	ok
19	Glass filter	1	210	210	ok
20	Thosiba television set	1	1450	1450	broken
21	Hitachi video player	1	1300	1300	ok
22	ACER NOTERBOOK 350EC	1	5049	5049	ok
23	Artwright Drafting table	1	2700	2700	ok
24	Drafting chair	1	450	450	ok
25	Manual typewriter	1	835	835	ok
26	Refrigerator	1	1400	1400	ok
27	Filing Cabinet	2	385	770	ok
28	Canon photocopier	1	3990	3990	not functioning
29	Canon Camera	4	485	1940	ok
30	Motorola Walkie talkie	4	1400	5600	ok
31	Rapid charger	4	160	640	ok
32	Planimeter	1	680	680	ok
33	Nikon Binocular	4	560	2240	ok
34	Drycabi cabinet (NDC-602G-AX)	1	2150	2150	ok
35	Topometric	5	1925	9625	ok
36	Bi12 Starlight 1st Generation	1	2800	2800	ok
37	Swift Binoculars	8	2800	22400	ok
38	Sokkia Sterociope-MS.27	1	2300	2300	ok
39	Sokkia Optional Eyepiece	1	985	985	ok
40	Drapter screen	1	700	700	ok
41	Slide Projector	1	1980	1980	ok
42	Sokkia Optional Eyepiece	1	1700	1700	ok
50	Sony 15" RGB colour monitor	1	1550	1550	ok
51	MAPINFO Professional version 4.5 sofware	1	7800	7800	ok

invest No.	Item Description	Quantity	Unit Price	Total MYR	Remarks
52	CALCOMP ULTRA DIGITIZER	1	17000	17000	ok
53	Chainsaw course equipment	1	565	565	ok
54	Leica Binoculars	4	5650	22600	ok
55	Bird book	3	25	75	ok
56	Mammals book	3	45	135	ok
57	Walkman	1	850	850	ok
58	Bird storage pouch	15		0	ok
59	Hammock	30	128	3840	ok
60	Herversackucksack	10	120	1200	ok
61	Mosquito net	30	35	1050	ok
62	Stretcher	1	350	350	ok
63	Jerry can(storing water)	3		0	ok
64	Magnifying glass	10	45	450	ok
65	insect net	3	125	375	ok
66	Bird net	4	37.5	150	ok
67	Laminating Foil	1	135	135	ok
68	GMP Laminating Machine: IC - 2301P	1	1850	1850	ok
69	NICON Binoculars	6	560	3360	ok
70	Over Head Projector SINON 26F	1	2850	2850	ok
71	Insect observation Mirrors	3	10	30	ok
72	Generator Cable	1	185	185	ok
73	Cable Rewinder	1	150	150	ok
74	Oven	1	650	650	ok
75	First Aid Kit	3	98	294	ok
76	Multi Tester	1	95	95	ok
77	Spotlight	3	285	855	ok
78	Multi Purpose Screw Driver	1	190	190	ok
79	Sink	2	185	370	ok
80	Aquarium	1	90	90	ok
81	Battery s/L	3	180	540	ok
82	Toothlight	15	35	525	ok
83	Mosquito net	20	35	700	ok
84	Polystyrine Cutter	1	295	295	ok
85	Battery Chargers	3	41	123	ok
86	Teletron Battery Charges	11	80	880	ok
87	Pump Light	3	25	75	ok
88	Wire (10m)	1	20	20	ok
89	Punch	1	10.5	10.5	ok
GRAND TOTAL				167,513.50	

Table 18 Investments, Kinabatangan

Invest No.	Item Description	Quantity	Unit Price	Total MYR	Remarks
1	Acernote light notebook	1	9500	9500	Kinabatangan
2	Camera Nikon zoom 500	1	795	795	Kinabatangan
3	Suunto Compass KB-14	1	340	340	Kinabatangan
	Grand Total			10635	

Table 19 Investments, Project Co-ordination Unit

Invest No.	Item Description	Quantity	Unit Price	Total MYR	Remarks
1	Computer-Acerpower/M Ultima	2	5888	11776	ok
2	Computer-Acermate 800	1	4699	4699	ok
3	Computer-Acermate486/g	1	4088	4088	ok
4	Hewlett Packard Laserjet 5P Printer	1	2999	2999	ok
5	Addition 8MB RAM	1	900	900	ok
6	Epson LQ-1170 Printer	1	2100	2100	ok
7	Emerson PL600UPS	1	1000	1000	ok
8	Aiwa Fax modem	1	600	600	ok
9	Anti virus cards AVC-2000	1	360	360	ok
10	Software application-Microsoft office 95'	2	1950	3900	ok
11	Microsoft project 95'	2	1550	3100	ok
12	Panasonic Facsimile Machine	1	1350	1350	ok
13	Toshiba Photostat machine	1	4700	4700	ok
14	Acernote 350 PC	1	6199	6199	ok
15	Serial Mouse	1	29	29	ok
16	Epson Stylus LLs Printer	2	588	1176	broken
17	Makinon Birds Guide	1	163.4	163.4	ok
18	Fleximont Stand	1	40	40	ok
19	Marine Antenna	1	230	230	ok
20	Handphone for Project Director	1	2400	2400	ok
21	Olympia Splendid 12" Typewriter	1	380	380	ok
22	National 4760 Vacuum Cleaner	1	399	399	ok
23	AcerEntra 500 (P200) with MMX	1	4788	4788	ok
24	AR 600SX Stabilizer	1	200	200	ok
25	Binding Machine	1	1500	1500	ok
26	Paper Cutter	1	309	309	ok
27	Canon BJC-4200SP colour printer	1	680	680	ok
28	UMAX Astra 1220S Scanner	1	1850	1850	ok
GRAND TOTAL				61915.4	

Table 20 Government Investment, Furniture.

Investment No	Item Description	Quantity	Unit Price	Total MYR	Remarks
1	AT 1500 2'6"x5'0" Table c/w AT H3 3-Drawer & AT 1060 Side Return	2	695	1390	
2	NT 2'6"x5'0" Table c/w Side Return	2	690	1390	ok
3	3'x6' TA Table M3 Mobile Pedestal	1	697	697	ok
4	Bookcase AT808 with base 32"x18"x32"	1	250	250	ok
5	Computer Table	2	300	600	ok
6	Printer Table	2	280	560	ok
7	4-D Filing Cabinet	5	390	1950	ok
8	300(B) Visitor chair	4	245	980	ok
9	1002 (B) Medium Back Chair	5	380	1900	ok
10	Nyatoh Conference Table	1	700	700	ok
11	Conference chair	10	195	1950	ok
12	TA Bookcase	1	250	250	ok
13	PELLY Typist chair	2	265	530	ok
14	Book shelves	1	110	110	ok
15	Computer Table	1	120	120	ok
	GRAND TOTAL			13377	

Table 21 Permanent Investments

Investment No	Item Description	Quantity	Unit Price	Total MYR	Remarks
1	Road Rehabilitation	23 km		600,000	Ok
2	Communication Tower	1	16,000	16000	Ok
3	Rhino Holding Facility	2	25,000	50,000	Ok
4	Guard House	1	48,000	48,000	Ok
5	Generators	2	4,000	8,000	Ok in Kampong Dagat and Tidong
6	School	1	110,000	110,000	Under Construction
	GRAND TOTAL			832,000	

Table 22 Vehicles

Invest No.	Item Description	Quantity	Unit Price	Total MYR	Remarks
1	Toyota Land Cruiser Mark II	4	72,000	288,000	One for repair Three ok
	Grand Total			10635	

Annex E AMENDMENTS TO THE PROJECT DOCUMENT

Project Start Date:	Project Co-ordination Unit	September 1 1995
	Tabin	September 1 st 1995
	Identification of Potential Protected Areas	January 1 st , 1996
	Kinabatangan	January 1st, 1996
Project End Date:	All Components	December 31, 1998

Table 23 Revised Project Planning Matrix

Description	Objectively Verifiable Indicators	Means of Verification	Assumptions
<p>Development Objective</p> <p>To improve and sustain the use of Sabah's biological resources.</p>			<p>The Government remains committed to plans of the project.</p> <p>The Government's biological resource management will be modified according to new knowledge.</p>
<p>Immediate Objectives</p> <ol style="list-style-type: none"> To enhance the capacity of the Ministry of Tourism and Environmental Development and relevant government agencies in conservation of biological diversity and management of biological resources. To strengthen biodiversity conservation and local development on selected sites. To improve the 			<p>Full Co-operation on training from GoS, and staff vacancies will not remain.</p> <p>Local schools and villages are willing to use information materials.</p> <p>GoS institutions will co-operate closely on data exchange with each other and with the project.</p> <p>Relevant GOs willing to discuss information on biodiversity and conservation needs is the coastal zone.</p>

<p>quality and availability of information on the biological diversity and its value and significance to communities.</p>			<p>the coastal zone. Local people in coastal zone co-operate with project staff.</p>
<p>Outputs Main Output: Preparation and implementation of a staff development and training plan. Increased number of staff of the <u>Environmental Development Division</u> trained in compilation, evaluation and use of survey data, environmental monitoring and in biodiversity conservation strategies and policy formulation. Increased number of staff of the <u>Wildlife Department</u> trained in methods for protected area and habitat management, participatory approaches, biodiversity field monitoring, environmental education, and planning and management of eco-tourism Increased number of staff of relevant government agencies trained in basic conservation skills. Raised awareness among local decision-makers on the importance of biodiversity and the role of local communities in its conservation. Raised awareness among high-level decision-makers on biodiversity, its importance to communities, and the role of communities in its conservation. Inter-institutional co-operation on natural resource management established. Protected areas established and management systems in operation within the Wildlife Department (for details see below) The adequateness of the existing system of protected areas including</p>	<p>A total of 260 staff of Ministry of Tourism and Environmental Development and other GOs trained; 75% able to conduct basic activities on biodiversity conservation and management in their field. More than 200,000 people by the end of the project aware of the importance of biodiversity and their role in its conservation. Inter-institutional collaboration on biodiversity management is regularly discussed within and between government agencies. Information on biodiversity is documented and discussed in detail on regular work-shops. A total of 200,000 ha of forest better conserved by end of project. Information on sites of importance to conservation and steps to be taken, documented and discussed in detail with relevant GOs by end of Year 3.</p>	<p>Project reports including both progress reports and technical reports serve as important means of verification.</p>	<p>Staff is available for training. Planned posting of Wildlife Department staff to Tabin and Kinabatangan will take place. GoM undertake basic infrastructure investments. Wildlife reserves will continue to be managed by Wildlife Department.</p>

<p>coastal zone areas for conservation of biodiversity assessed, potential new protected areas and steps to be taken for their establishment identified (for details see below)</p> <p>Specific outputs under the headings of:</p> <p>Management Support to the Tabin Wildlife Reserve</p> <p>Identification of Potential Protected Areas</p> <p>Multidisciplinary Conservation Study of the Lower Kinabatangan Basin</p> <p>Training activities under the Project Co-ordination Unit.</p>			
<p>Activities</p> <p>7 site studies</p> <p>2 sector studies</p> <p>Training programmes</p> <p>Active area management</p> <p>120 reports</p>			
<p>Inputs</p> <p>DANCED:</p> <p>Technical assistance</p> <p>Field Cost</p> <p>Three Project Co-ordination Unit staff</p> <p>Sabah Government:</p> <p>Counterpart staff</p> <p>Office Space</p>		<p>Check here if original Planning Matrix <input checked="" type="checkbox"/></p> <p>Else state revision number:</p> <hr/> <p>Check here if proposed revised Matrix <input type="checkbox"/></p> <p>Else state date approved:</p>	

Annex F LIST OF REPORTS

The attached list of reports numbers the reports using a double number system. The first two digits refer to the following System:

- 00 Project Document, Project Government Agreement (not included in the list)
- 10 Administration, Finance
- 20 Technical Assistance, COWI
- 25 Technical Assistance, World Wide Fund for Nature Malaysia
- 50 Project Co-ordination Unit activities
- 70 Identification of Potential Protected Areas
- 80 Tabin
- 90 Kinabatangan

For the numbers 50 – 90, the second digit (5x – 9x) refer to:

- 1 Progress Reports
- 2 Technical Reports
- 3 Internal Papers
- 4 Briefings

The second part of the numbering system constitutes a consecutive numbering.

Table 24 Project Co-ordination Unit Reports

Report Numbering	Title	AUTHOR	Date Month/ Year
51 – 01	Initial Report	Mr. Eivind O. Kofod	November 1995
10 – 01	Accounts Manual	Mrs. Jacqueline Simpson	February 1996
00 – 00	Project Document	Mr. Jammy Gabriel	April 1996
00 – 05	Plan of Operation: Project Co-ordination Unit	Mr. Theodore Kinson	April 1996
51 – 02	Inception Report	Mr. E.O. Kofod	April 1996
10 – 02	Accounts Manual - version 2	Mr. E.O. Kofod	May 1996
51 – 03	Project Progress Report: Main progress report	Mr. Jammy Gabriel	August 1996
51 – 04	Project Progress Report: Project Co-ordination Unit	Mr. Theodore Kinson	August 1996
52 – 01	Study Tour to Denmark	Mr. Jammy Gabriel	Sept. 1996
53 – 01	Environmental Development Division: Future Development Plan	Mr. E.O. Kofod	October 1996
53 – 02	Proposal for Project Organisation	Mr. E.O. Kofod	November 1996
53 – 03	Draft Proposal: Environmental Development Training Plan	Mr. E.O. Kofod	December 1996
53 – 04	Environmental Development Division: Organisational Assessment	Mr. Theodore Kinson	
53 – 05	Environmental Development Division: Training Need Assessment	Mr. Theodore Kinson	
53 – 06	Environmental Development Division: Environmental Impact Assessment Training	Mr. Theodore Kinson	January 1997
53 – 07	Proposal for Itinerary for a visit to DKK- for Minister of Min. of Tourism and Environmental Development	Mr. E. O. Kofod	February 1997
54 – 01	Briefing Note to the Permanent Secretary of the Ministry of Tourism and Environmental Development	Mr. Jammy Gabriel	March 1997
52 – 02	Introduction to the Internet	Mr. E. O. Kofod	March 1997
54 – 02	Briefing Note to DANCED, Kuala Lumpur	Mr. Jammy Gabriel	April 1997
51 – 05	Project Progress Report: Main progress report	Mr. Jammy Gabriel	May 1997

Report Numbering	Title	AUTHOR	Date	
			Month/	Year
51 – 06	Project Progress Report: Project Co-ordination Unit	Mr. Theodore Kinson	May	1997
10 – 03	Terms of Reference, Mid-Term Review Mission	Mr. E.O. Kofod	June	1997
51 – 07	Project Progress Report Main progress report	Mr. Jammy Gabriel	August	1997
51 – 08	Project Progress Report: Project Co-ordination Unit	Mr. Theodore Kinson	August	1997
51 – 10	Project Progress Report: Project Co-ordination Unit	Mr. Theodore Kinson	October	1997
51 – 11	Project Progress Report: Project Co-ordination Unit	Mr. Theodore Kinson	November	1998
10 – 04	Mid Term Status Report	Mr. E.O. Kofod	August	1997
53 – 08 -	Concept Paper of Training Course for EDD: Environmental Assessment	Mr. Theodore Kinson/ Ms. Julia Majail	Sept.	1997
51 – 09	Project Progress Report: Main progress report	Mr. Jammy Gabriel	October	1997
51 – 12	Project Progress Report: Main progress report	Mr. Jammy Gabriel	November	1998
55 – 01	Ideas for Project Follow-up	Mr. E.O. Kofod	December	1997
53 – 09	Project Training Activities	Mr. Theodore Kinson	December	1997
52 – 03	Planning Implication of Mid Term Review: ❖ Project Co-ordination Unit ❖ Tabin Wildlife Reserve	Mr. E.O. Kofod	January	1998
52 – 04	Project Proposals for the Sabah Wildlife Department, 1999 - 2001	Mr. Mahedi Andau	March	1998
53 – 10	Proposal of a Study of Gravity Fed Water Supply Systems in The Crocker Range	Mr. E.O. Kofod	April	1998
53 – 11	Project Approach to the Environmental Development Division	Mr. Theodore Kinson	April	1998
53 – 12	Project Co-ordination Unit Activities: Natural Resources	Mr. Theodore Kinson	April	1998
53 – 13 -	Concept Paper of Training Course for Environmental Development Division: Training in ISO 14000 (Environmental Management System)	Mr. Theodore Kinson/ Ms. Julia Majail	April	1998
52 – 05	Executive Summary of Reports on the Group Study Tour to Sarawak	Ms. Julia Majail	May	1998

Report Numbering	Title	AUTHOR	Date Month/ Year
	24 January – 2 February 1998		

Table 25 Tabin Reports

Report Numbering	Title	AUTHOR	Date Month/ Year
00 – 02	Plan of Operation: Tabin Wildlife Reserve	Mr. Peter Malim	March 1996
82 – 01	Planning Guide	Mr. E.O. Kofod	
81 – 01	Project Progress Report: Tabin Wildlife Reserve	Mr. Peter Malim	August 1996
81 – 02	Co-operating with Communities on Conservation Proposals and Recommendations	Ms. Julia Majail/ Mr. Claus Rebien	November 1996
82 – 02	DANCED Small Grant Application: Elephant Filming	Mr. E.O. Kofod	February 1997
81 – 03	Project Progress Report: Tabin Wildlife Reserve	Mr. Peter Malim	May 1997
82 – 03	A Proposed Protection Strategy for the Tabin Wildlife Reserve	Mr. Ronald Petocz	May 1997
82 – 04	Summary on Training Need Assessment & Recommendations on Training for the Staff of the Tabin Wildlife Reserve	Mr. Ronald Petocz	May 1997
82 – 05	Training for Wildlife and Habitat Census: A selection of Lessons & Methods for the staff of the Tabin Wildlife Reserve	Mr. Ronald Petocz	May 1997
82 – 06	Proposed Protection Strategy for the Tabin Wildlife Reserve	Mr. Ronald Petocz	May 1997
81 – 04	Project Progress Report: Tabin Wildlife Reserve	Mr. Peter Malim	August 1997
81 – 05	Project Progress Report: Tabin Wildlife Reserve	Mr. Peter Malim	October 1997
81 – 05	Project Progress Report: Tabin Wildlife Reserve	Mr. Peter Malim	November 1998
82-07	Preliminary environmental impact assessment for Upgrading of 23 km Forest Road in Tabin Wildlife Reserve, Lahad Datu, Sabah.	Ecoton Management Sdn Bhd Wildlife Department Staff	July 1998

Table 26 Kinabatangan Reports

Report Numbering	Title	AUTHOR	Date Month/ Year
00 – 04	Plan of Operation: Kinabatangan	Mrs Jum Rafiah Abdul Shukor	April 1996
91 – 01	Final Report: Kinabatangan Multi Disciplinary Study	Dr. Junaidi Payne	August 1996
91 – 02	Project Progress Report: Kinabatangan	Mrs Jum Rafiah Abdul Shukor	August 1996

Table 27 Identification of Potential Protected Areas Reports

Report Numbering	Title	AUTHOR	Date Month/ Year
00 – 03	Plan of Operation: Identification of Potential Protected Areas	Mrs. Teresa A. Dainal	April 1996
71 – 01	Project Progress Report: Identification of Potential Protected Areas	Mrs. Teresa A. Dainal	August 1996
71 – 02	Project Progress Report: Identification of Potential Protected Areas	Dr. Junaidi Payne	May 1997
71 – 03	Project Progress Report: Identification of Potential Protected Areas	Dr. Junaidi Payne	August 1997
71 – 04	Project Progress Report: Identification of Potential Protected Areas	Dr. Junaidi Payne	October 1997
71 – 05	Project Completion Report: Identification of Potential Protected Areas	Dr. Junaidi Payne	November 1998

Table 28 Financial Reports

Report Numbering	Title	AUTHOR	Date Month/ Year
10 – 05	Memorandum of Agreement: Funds Disbursement: Components:- ❖ Project Co-ordination Unit ❖ Identification of Potential Protected Areas ❖ Lower Kinabatangan Basin	Mr E.O. Kofod	May 1996
10 – 06	Financial Progress Report	Mr E.O. Kofod	May 1997
10 – 07	Financial Progress Report	Mr. E.O. Kofod	August 1997
10 – 08	Financial Progress Report	Mr E.O. Kofod	October 1997
10 – 10	Financial Progress Report	Mr. E.O. Kofod	November 1998
10 – 09	Promotional Video for DANCED DRAFT Standard Small Grant Document	Mr. E.O. Kofod	

Table 29 Technical Reports, COWI

Report Numbering	Title	AUTHOR	Date Month/ Year
20 – 01	Project Management	Mr. E.O. Kofod	November 1998
20 – 02	Activity Report for Wildlife Monitoring advisor	Mr. Jan Durinck	September 1998
20 – 03	Environmental Education – Wildlife Department	Mr. Anders Tvevad	September 1998

Table 30 Additional Reports from Identification of Potential Protected Areas

Report Numbering	Title	AUTHOR	Date Month/ Year
73 – 01	Assessment of Soils, Ulu Padas area, Sipitang District, Interior Residency, Sabah Malaysia	Dr. Selliah Paramanathan <i>Soil scientist</i>	April 1998
73 – 02	Conservation and Development in the Ulu Padas area: an analysis of local people's principles of involvement	Mr. Paul Towell <i>Anthropologist</i>	May 1997
73 – 03	Economic Assessment of Ulu Padas	Dr. Jamal Othman <i>Environmental economist</i>	April 1998
73 – 04	The Botanical Richness of Ulu Padas	Ms. Anthea Phillipps <i>Botanist</i>	
73 – 05	The Hydrological and Geomorphological Assessment of the Ulu Padas	Dr. Waidi Sinun <i>Hydrologist</i>	
73 – 06	Ulu Padas Community Planning Workshop (Long Pasia)	Ms. Justine Vaz <i>Project biologist</i>	
73 – 07	Ulu Padas Development Planning Workshop (Sipitang)	Ms. Justine Vaz <i>Project biologist</i>	November 1997
73 – 08	Ulu Padas - Site Final Report and Recommendations	Ms. Justine Vaz <i>Project biologist</i>	
73 – 09	Assessment of soils, Bukau (Klias Peninsula) area, Beaufort District, Interior Residency, Sabah, Malaysia	Dr. Selliah Paramanathan	
73 – 10	Socio-economic Appraisal of Selected Villages in the Klias Peninsula	Dr. Suriani Suratman	
73 – 11	Economic Assessment of Klias Peninsula	Dr. Jamal Othman <i>Environmental economist</i>	
73 – 12	Development Study - An Economic Study of Natural Resource Use and the Potential for Integrated Conservation Projects (ICDPs) in the Klias Peninsula	Ms. Grace Wong <i>Resource economist</i>	September 1998
73 – 13	Forest of the Bukau Api-api Area, Klias Peninsula, A Botanical Assessment & Conservation Perspective	Forest Research Centre, SFD <i>Botanists</i>	
73 – 14	Hydrological Assessment of Klias Peninsula	Dr. G. Balamurugan <i>Hydrologist</i>	
73 – 15	Some Aspects and Status of Fisheries at Padas Damit, Klias Peninsula	En. Mohd. Saini Suliansa <i>Fisheries specialist</i>	May 1998

Report Numbering	Title	AUTHOR	Date
			Month/ Year
73 – 16	Some Aspects and Status of Fisheries at Bukau - Api-api River, Klias Peninsula	En. Mohd. Saini Suliansa <i>Fisheries specialist</i>	May 1998
73 – 17	Klias Peninsula Assessment of Tourism Potential	Ms. Justine Vaz <i>Project Biologist</i>	
73 – 18	Wildlife Assessment of Klias Peninsula	Dr. Geoffrey Davison <i>Wildlife biologist</i>	
73 – 19	Klias Peninsula - Site Final Report and Recommendations	Ms. Justine Vaz <i>Project Biologist</i>	
73 – 20	Between Reserves and Estates - Report on the land and livelihood concerns of the Tidung people, lower Segama	Dr. Lye Tuck Po <i>Anthropologist</i>	December 1997
73 – 21	Lower Segama - Site Final Report and Recommendations	Dr. Junaidi Payne <i>Chief Technical Adviser</i>	
73 – 22	Assessment of soils, Ulu Membakut area, Papar and Beaufort Districts, Interior Residencies, Sabah	Dr. Selliah Paramanathan <i>Soil scientist</i>	
73 – 23	Report on the sociological needs of Ulu Membakut, Crocker Range, incorporating an update from the follow-up survey to assess post-March 1998 fire damage	Dr. Lye Tuck Po <i>Anthropologist</i>	March 1998
73 – 24	Botanical Assessment & Conservation Perspective of Ulu Membakut, Crocker Range Foothills	Forest Research Centre, SFD <i>Botanists</i>	
73 – 25	Hydrological Assessment of the Crocker Range	Dr. Anthony Greer <i>Hydrologist</i>	
73 – 26	Some Aspects and Status of Fisheries at Ulu Membakut, Crocker Range Foothills	En. Mohd. Saini Suliansa <i>Fisheries specialist</i>	May 1998
73 – 27	Report on an Aerial Survey of Crocker Range, 25 August 1998	Dr. Junaidi Payne <i>CTA</i>	August 1998
73 – 28	Wildlife Survey around Crocker Range Foothills	Dr. Geoffrey Davison <i>Wildlife Biologist</i>	September 1998
73 – 29	Crocker Range Foothills Site Final Report and Recommendations	Dr. Junaidi Payne <i>CTA</i>	
73 – 30	Conservation and community aspirations in the Lower Sugut	Dr. Lye Tuck Po <i>Anthropologist</i>	
73 – 31	Botanical Survey of the lower Sugut River	Mr. Reza Azmi <i>Botanist</i>	May 1998
73 – 32	Some Aspects and Status of Fisheries at	En. Mohd. Saini Suliansa	May 1998

Report Numbering	Title	AUTHOR	Date Month/ Year
	the lower Sg. Sugut	<i>Fisheries specialist</i>	
73 – 33	Report on an Aerial Survey of Lower Sugut area, 28 July 1998	Dr. Junaidi Payne <i>CTA</i>	July 1998
73 – 34	Development study - The Opportunity Cost of Conservation: an Economic Study of Natural Resource Use, lower Sugut.	Ms. Grace Wong <i>Resource economist</i>	September 1998
73 – 35	Sugut Development Workshop Report	Ms. Flory Siambun <i>Project Biologist</i>	
73 – 36	Lower Sugut Final Report and Recommendations	Dr. Junaidi Payne <i>CTA</i>	
73 – 37	The Kerangas Forests of Nabawan - A Botanical Assessment & Recommendations for Conservation	Forest Research Centre, SFD <i>Botanists</i>	
73 – 38	Non-Tree Flora of the Nabawan Kerangas Forests	Mr. Anthony Lamb <i>Botanist</i>	
73 – 39	Development Study - An Analysis of the Forest-Based Economies of Rural Households in Nabawan, Sabah	Ms. Grace Wong <i>Resource economist</i>	
73 – 40	Nabawan - Site Final Report and Recommendations	Ms. Flory Siambun <i>Project biologist</i>	
73 – 41	Estate Surveys, June-August 1996	Rajanathan Rajaratnam	February 1997
73 – 42	Forests in Plantations Workshop (9 October 1997) - Report and Recommendations	Dr. Junaidi Payne <i>CTA</i>	October 1997

Annex G PROPOSED PROJECT EXTENSION

The immediate objectives of the Sabah Biodiversity Conservation Project were:

- *Objective 1: To enhance the capacity of the MTED and relevant government agencies in the conservation of biological diversity and management of biological resources.*
- *Objective 2: To strengthen biodiversity conservation and local development on selected sites.*
- *Objective 3: To improve the quality and availability of information on biological diversity and its value and significance to communities.*

The Sabah Biodiversity Conservation Project has successfully completed the outputs planned to achieve the objectives within the organisational framework within which it operated. The project was aware that the Environmental Development Division was to be transformed into the Department of Environmental Conservation and initiated many training initiatives and provided initial management systems that addressed the needs of the Department.

With the formation of the Department of Environmental Conservation August 1998 the settings of the project changed drastically and the requirements to the project were increased. Requests for changes to project outputs already completed were also necessary. These requests could not be fully honoured within the present project timeframe although attempts were made to do so.

The increased burden on the local counterparts during the transition period made them partly unavailable for project work for some months.

It is on this background, the Department of Environmental Conservation forwards this request for a 6 months extension of DANCED support and that the project management requests permission to adjust the remaining budgets to accommodate the

request. The extension of the project will involve only three months advisory input in addition to operational funds.

OUTPUT

The proposed extension of parts of the Sabah Biodiversity Conservation Project shall have the original project objectives in mind. Specifically, this extension shall

- *Complete the natural resources management activities for the Department of Environmental Conservation by assisting in the establishment of management procedures for the Department of Environmental Conservation, Sabah.*

ACTIVITIES

Databases

Three databases were set up during the Sabah Biodiversity Conservation Project:

1. Database for water quality monitoring;
2. Database for ‘Development Projects’ (e.g. quarries, sand extraction, landfills etc.);
3. Administrative base for the Environmental Action Committee.

The three bases allow data to be stored together with administrative data related to the projects. Bases 2 & 3 are prepared for later GIS applications.

The staffs have extensively used especially bases 1 and 2, which have proven to ease the workload of individuals as well as improving the quality of the work of the Department. The staff directly involved in using the bases has been introduced to the basic aspects of relational database management, but not to a degree, where they can build complex bases on their own. It is not anticipated feasible that staff should build bases from the ground, but they should be able to make desirable changes in existing base structures, data searches, report formats and data processing (statistics, grouping and other analysis).

It is acknowledged that the possibilities within this field are almost limitless. Given the widened scope of work now entrusted to the project counterparts a number of aspects are desirable to include.

Data is already in the systems.

Staff Management

The Sabah Biodiversity Conservation Project has provided systems for staff statistics and personnel management. Introduction of the systems under the Environmental Development Division were weak and advisory support is needed to bring the systems operational. Work distribution and procedures have changed wherefore the project has been requested to adjust the systems to suit the new environment.

Administrative Management

As a new department, the Department of Environmental Conservation is required from the onset to set up administrative procedures at departmental, sector and individual level. Such procedures include, budgeting, forecasting and accounting. The department wishes all staff to participate and share responsibility in this task.

The Department therefore wishes to build on the experience of the Sabah Biodiversity Conservation Project, where all Project Co-ordination Unit and Tabin staff became proficient in these routines and the computerised techniques available in the office today.

OPERATION COST

It is assumed computer equipment from the Sabah Biodiversity Conservation Project (the Project Co-ordination Unit and the Identification of Potential Protected Areas components) will be transferred to the Department of Environmental Conservation as of January 1, 1999.

The Department of Environmental Conservation staff will thereby be reasonably well equipped with individual computers. In order to fully utilise databases and other management tools, every staff should have easy access to these bases through an internal networking arrangement. The Government would under normal conditions provide such arrangement to the department. However, the conditions are not normal, and it is not likely, the government will be in a position to provide this facility within a reasonable time.

In order to fully utilise DANCED expertise in the Sabah Biodiversity Conservation Project as well as the data management systems created by that project the project management requests approval of a budget adjustment that caters for this need. A local quotation has been received totalling approximately Ringgit 35,000.

EXTENSION OF DANCED SUPPORT

DANCED support to the Sabah Biodiversity Conservation Project is scheduled to be terminated at year's end 1998, after which the State Government is scheduled to continue the project without external support.

The Department of Environmental Conservation requests that the DANCED support and supervision be extended a further six months within the scope of the present grant.

TECHNICAL ASSISTANCE

The Department of Environmental Conservation requests that DANCED extends the services of COWI for an additional three man-months to be utilised by the present Chief Technical Advisor (management) to assist in the issues described above.

EXTENSION PERIOD

An extension of DANCED support for the Sabah Biodiversity Conservation Project is proposed for 6 months beginning January 1, 1999.

The proposed advisory services shall be 3 man-months to be delivered within the extension period.

BUDGET

The Department of Environmental Conservation requests permission to make a budget reallocation of the Sabah Biodiversity Conservation Project DANCED grant facilitating the proposed project extension.

The budget below is made on the assumption that the advisor is available in Malaysia. A delayed decision may result in the advisor being abroad; i.e. the budget should be amended for travelling cost. There are sufficient funds available for such amendment.

Table 31 Summary of Project Extension costs

Item	DKK
Operational Cost	65,250
Technical Assistance	400,000
Total Cost	465,250

Table 32 Operations Cost, Project Extension

Rate of Exchange: 1MYR= 1.74 DKK

Cost Item	Unit	Unit Price	Volume	Item Cost MYR	Item Cost DKK
Networking	ino	35,000	1	35,000	60,900
IT Assessories	lump	1,000	1	1,000	1,740
Print, copy etc	lump	1,500	1	1,500	2,610
Total				37,500	65,250

Cost of technical assistance for 3 months is estimated at DKK 400,000. This includes continued operation of two vehicles purchased under the COWI – DANCED technical assistance agreement.

Annex H LIST OF TRAINING ACTIVITIES

The list below is indicative and intended to show the scope of the formal training only. Details of training activities are listed in the COWI technical assistance report on training to be completed medio December 1998.

- 1 Training of Elephant Caretakers
- 2 Field Training On Wildlife Line Transect Techniques
- 3 Participatory Rural Appraisal Techniques
- 4 Accounting and Administration
- 5 Logical Framework Approach
- 6 Critical Path Analysis
- 7 Budgeting
- 8 Report Writing
- 9 Environmental Management
- 10 First Aid
- 11 Fire Precaution
- 12 Wildlife Legislation
- 13 Elephant Translocation Training
- 14 Geographical Information Systems Mapping (The Philippines)
- 15 Nature Education Training
- 16 Point Count Techniques
- 17 Environmental Impact Assessment Course
- 18 Database Capture And Geographical Information Systems

- 19 Arial Photo Interpretation
- 20 Wildlife Management For Rangers
- 21 Study Tour To Sarawak
- 22 ISO 14000 (Environmental Management)
- 23 Environmental Conservation Legislation
- 24 National Policy On Biodiversity
- 25 4x4 Excursion For Private Sector Leaders
- 26 Excursion For Local Decision Makers
- 27 Databases For Management Of Development Projects
- 28 District Level Wildlife Department Planning
- 29 Study Tour To Denmark
- 30 Use And Maintenance Of Chainsaws
- 31 Posting to Environmental Board of Sarawak
- 32 Studies of Elephant ecology at University of Malaya, Sabah
- 33 Studies of Gravity Fed Water Supply Systems in Crocker Range at University of Malaya, Sabah
- 34 Participation in various workshops, seminars and conferences for Wildlife Department and Environmental officers.
- 35 On-the-job Training

Annex I PROPOSALS FOR FOLLOW-UP ACTIVITIES

INTRODUCTION

The Sabah Biodiversity Conservation Project arranged September 1997 a full day meeting with heads and senior staff of the Environmental Development Division and Wildlife Department as well as all project staff and advisors. The purpose of this meeting was to propose activities as follow-up of the present Sabah Biodiversity Conservation Project and for which foreign funding and/or advisory services were desirable.

It was during the meeting assumed, the Sabah Biodiversity Conservation Project would meet its physical goals during its planned period of implementation.

Discussions internally and with the Permanent Secretary of the Ministry of Tourism and Environmental Development have lead to this document, which thus expresses the wishes of the Ministry of Tourism and Environmental Development without being a formal project request.

Even though there is a strong need for support for

- infrastructure;
- equipment;
- formal post graduate training,

these topics have been excluded from the present document as they have been considered outside DANCED's normal agenda.

GOVERNMENT EXECUTION OF THE SABAH BIODIVERSITY CONSERVATION PROJECT

The Project Document of 1994 stipulates a project period of five years. DANCED support was expected to be active for the initial three years, whereas the Government of Sabah was expected to continue the project on its own for another two years.

There has so far been no mentioning of what was expected to happen in these last two years.

It can be argued that it is against the policies of all parties to have the project continue as a government *project*, i.e. with its own organisational structure. The project should by the end of its third year have reached a stage where all activities have been fully integrated in the government work, whereby the project structure should have disappeared. Activities should proceed and follow-up activities be initiated.

The expected formation of the Department of Environmental Conservation is a step along this line. This department will be able to perform direct continuations of the present Project Co-ordination Unit and Identification of Potential Protected Areas activities.

The Ministry of Tourism and Environmental Development, however, is dedicated to the idea of having an organisational structure to actively pursue and develop the field, initiated by the Sabah Biodiversity Conservation Project. The ministry therefore pledges to absorb into its normal functions the direct implications of the project and that either

- new activities with DANCED support are added to the project for the following two years

or

- the idea of a government implemented project implemented project structure is replaced with one or more new DANCED supported projects.

The Ministry will not at this time or on this paper comment on the scope or structure of advisory services as this has not been touched during project discussions.

WILDLIFE DEPARTMENT

HEAD QUARTERS

The Wildlife Department has on earlier occasions benefited from having advisors attached directly to the head quarters. This was particularly the case when departmental development policies were developed.

The Department feels it would be beneficial to receive technical assistance in the fields of extension work. The Director of the Wildlife Department has during an excursion arranged by the Sabah Biodiversity Conservation Project to Denmark studied the methods and scope of extension done by the Forest And Nature Agency of

Denmark including the active involvement of NGOs. Advisory services within this field including the production of state wide extension material would be beneficial.

Likewise, the Wildlife Department is positive to the idea of 'Nature Schools' and general environmental education of school children as seen in Denmark. The Wildlife Department would be pleased to receive technical assistance within this field including assistance in training of nature interpreters.

TRAINING CENTRE

The Tabin Wildlife Reserve has with the assistance of the Sabah Biodiversity Conservation Project become a centre for training of Wildlife Department staff. The DANCED/UMS project will further attract research to the reserve.

Since there is a lack of training facilities for biodiversity in the region, it is the wish of the Wildlife Department to create such facility in Tabin.

Technical assistance will be needed for planning of physical infra structure as well as course development and the creation of training material.

The training centre should train wildlife guides as required by the new legislation, schools, professional bodies, government staff as well as the general public.

KINABATANGAN

Assistance is needed for follow-up of some of the recommendations made by the Sabah Biodiversity Conservation Project. This is particularly so for the detailed land use plan and plans for habitat management of the areas laid out as reserves.

TABIN WILDLIFE RESERVE

The Tabin Wildlife Reserve has during the Sabah Biodiversity Conservation Project been well established with the beginnings of firm infrastructure, with a well defined programme.

These activities are now all fully integrated in the daily routines of the Wildlife Department and the workings of the Tabin Wildlife Reserve.

New activities, that would benefit external assistance in the form of funding or technical assistance are

- The Wildlife Department has completed a major part of the demarcation of the southern boundary of Tabin. Funding is needed to continue this work.
- An access track has been made into the reserve. Additional 30 km of similar 4x4 track is needed in order to effectively manage the reserve. Funding and some technical assistance is needed for this activity.
- The major aspect of Wildlife Department work in Tabin Wildlife Reserve in the near future concerns survey and monitoring of wildlife as well as habitat. Since there is here a chance to build this correctly from the start, it is highly desirable to

attach technical assistance in the fields of GIS, Electronic Mapping, Biometrics, Wildlife statistics, habitat management and soil science in addition to the various fields of biology to the reserve.

- Sociology and co-operation with the surrounding communities has successfully been introduced to Tabin Wildlife Reserve. This work should be extended to include work with the estate workers. External as well as national sociological technical assistance will be needed for this. These activities will also present a chance to study in detail wildlife's importance to the local diet and other aspects of local use of the biodiversity for food, handicraft, medicine, etc.
- An educational program for schools has been initiated in Tabin Wildlife Reserve by the Sabah Biodiversity Conservation Project. The staff have taken an interest in this work and there is a wish to further improve the activities as well as the facilities.

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DEPARTMENTAL SUPPORT

This department is expected to be established during the final year of implementation for the Sabah Biodiversity Conservation Project and the project is expected to initiate work within the department.

Technical assistance and funding will be desirable for

- Policy definition
- Capacity building
- Staff support and training
- The creation of action plans on short, medium and long term
- Enforcement of the legislation

IDENTIFICATION OF POTENTIAL PROTECTED AREAS

As a follow up of the activities initiated under the Identification of Potential Protected Areas component of the Sabah Biodiversity Conservation Project, technical assistance and external funding is required to facilitate appropriate development and management of specific areas as recommended under the Sabah Biodiversity Conservation Project as well as identification of additional new areas.

Annex J PROJECT IDEA DESCRIPTION

Ministry of Culture, Environment and Tourism
Sabah

Project Idea Description

Capacity Building for the Sabah Wildlife Department

Submitted to the Danish Co-operation for Environment
and Development

December 1998

Proponent / Organisation

The project proponent is the Wildlife Department of Sabah through the Ministry of Culture, Environment and Tourism of Sabah and the State and Federal Economic Planning Units.

The Wildlife Department is a state agency established in 1988 under the Ministry of Tourism and Environmental Development and charged with responsibilities for the conservation and management of wildlife resources and habitats in Sabah. The scope of the duties, functions and jurisdiction of the Wildlife Department is defined in the newly-enacted Wildlife Conservation Enactment 1997 in addition to its international responsibilities such as Sabah Management Authority for CITES (Convention on International Trade of Endangered Species), member of IUCN and others.

Project Objective(s)

The overall objective of this project is to enhance the capabilities of the Wildlife Department staff and management in managing the State's natural resources to a point where no further external assistance will be needed in the fields included in this project.

Project Description

The project is expected to support capacity building within the Wildlife Department Head Quarters and district offices with emphasis on policy and strategy definition as well as management issues.

Project approach will be one based on training of Wildlife Department staff and staff of other relevant government institutions in order these may carry out all duties without external support in the future. Training will be on-the-job training as well as more formalised internal and external training.

Study tours and attachment of Wildlife Department officers in institutions else where is envisaged.

The overall emphasis is to train the Wildlife Department officers in awareness of state policies and to give them initiative within that framework.

Counterparts

The director of the Wildlife Department, Mr Mahedi Andau will be the Project Director and as such head the project activities. All senior staff will be included in the group of counterparts for the technical assistance advisors.

At the moment, the Sabah Wildlife Department has eight officers with a bachelor degree in Biology/Zoology, two officers with a bachelor degree in Botany, one veterinary officer and one officer with a diploma in Forestry. A majority of these officers are based in the districts of West Coast, Sandakan, Kota Kinabatangan, Lahad Datu and Tawau and field stations such as Tabin Wildlife Reserve and Lower Kinabatangan Wildlife Sanctuary. At the headquarters office, a deputy director and three other officers assist the director.

In addition to the district planning and management works, each officers are entrusted the task as managers of the various species such as the marine mammals, tembadau / banting (large mammals), birds (terrestrial and coastal), rhinoceros, smaller mammals, insects and nature education.

Currently, two officers are taking a master's degree on part-time basis (long distance learning). It is anticipated that more officers will be taking up higher degree in the foreseeable future.

In addition, it is expected the proposed project will co-operate with several other Government departments, NGOs and the private sector.

Outputs

Main outputs are expected to be:

- Wildlife Department staff trained in management and planning related issues;
- Working plans established for all districts and selected Wildlife Reserves;
- A 3-year working plan for an oceanic section and staff trained in issues relevant to the implementation of the plan;
- A biodiversity training centre built (Government of Sabah contribution) in accordance to project plans, and facilities equipped for their purposes;
- Initial course schedules for biodiversity training established and lecturers identified;
- A nature education policy for the Wildlife Department approved by the State Cabinet and programs initiated.
- A land use plan / management plan for the Lower Kinabatangan Wildlife Sanctuary established and proposed to the State Cabinet;
- A habitat management system installed in the Tabin Wildlife Reserve.

Proposed Budget, Kroner

The below attached budget is made on best available estimates for advisory fees and cost plus an estimate of operational cost being 55% of technical assistance cost. All monetary figures are in Kroner.

	Rate	fee	Main Component	incl/excl	Totals				Figures per mm							Fee Cost	Reimb. Cost	Total Cost	Cost per mm
					Internat. Travel/visa	Air Freight	Removal All.	Hotels, KK	local airfare	Field Allowance	Long term Housing	Hotels local	Communication	Transport	Schooling				
		0	0	0	0										0	0	0	0	0
		0	0	0	0										0	0	0	0	0
		0	0	0	0										0	0	0	0	0
cta	36	100,000	1	1	16	2	80	1	7	1	7.0	1.0	2.0	4.0	3,600,000	1,293,000	4,893,000	135,917	
Wildlife Monitoring	3	85,000	1	1	1			1	30		15.0			1.0	255,000	56,350	311,350	103,783	
GIS/Data bases (Local)	3	50,000	1	1				1						1.0	150,000	2,250	152,250	50,750	
Oceanic	6	85,000	2	1	1			1	30		4.0			1.0	510,000	83,800	593,800	98,967	
Dugongs	4	85,000	2	1	1			1	30		15.0			1.0	340,000	72,100	412,100	103,025	
Training Centre Dev	4	85,000	3	1	2			1	30		15.0			1.0	340,000	81,200	421,200	105,300	
Sociology	2	85,000	4	1	1			1	30		15.0			1.0	170,000	40,600	210,600	105,300	
Env. Educ	3	85,000	4	1	1			1	30		7.0			1.0	255,000	49,150	304,150	101,383	
The team	36								1		1.0	1.5			0	828,000	828,000	23,000	
Head Quarter	3	90,000			6		12		2		0.5				270,000	65,700	335,700	111,900	
Total	64				29		92								5,890,000	2,572,150	8,462,150	131,604	
Comtingencies		10 %													589,000	257,215	846,215		
TA Total																	9,308,365		
Operational Cost	55	5,119,601															5,119,601		
Project Grand Total		Kroner															14,427,966		

Annex K TERMS OF REFERENCE FOR PROJECT PROPOSAL STAGE

**Terms of Reference
for
Assistance to the preparation of the Project Document for the
Capacity Building of the Wildlife Department Project**

**File no/name
Date**

1. Background:

1.1 Danish Assistance

The Danish Cooperation for Environment and Development (DANCED) was established in 1993 as a followup to the UNCED Conference held in Rio De Janeiro in 1992. The overall objective of the DANCED programme is restoring the global environment in accordance with the recommendations of UNCED (Agenda 21). The programme is managed by the Ministry of Environment and Energy in coordination with the Ministry of Foreign Affairs.

The DANCED programme in Malaysia gives priority to i.a. the following areas:

- Urban Environmental Management and Industrial Pollution
- Sustainable Use of Energy
- Forest and Wood Resources
- Biological Diversity
- Coastal Resources

1.2 Wildlife Department

The Wildlife Department is a state agency established in 1988 under the Ministry of Tourism and Environmental Development and charged with responsibilities for the conservation and management of wildlife resources and habitats in Sabah. The scope of the duties, functions and jurisdiction of the Wildlife Department is defined in the newly-enacted Wildlife Conservation Enactment 1997 in addition to its international responsibilities such as Sabah Management Authority for CITES (Convention on International Trade of Endangered Species), member of IUCN and others.

1.3 Draft Project Document for the Capacity Building of the Wildlife Department

The outline strategy of the a Capacity Building project the Wildlife Department is to enable the department to enforce wildlife and endangered species regulation, raise public awareness on these issues and to develop the institutional and the organizational capacity and capability of the Wildlife

Department. The project should address capacity development of the human resources as well as the institutional settings and long term planning of the department. The project strategy should reflect the GOM/GOS commitments to the implementation and sustaining of the project. The duration of the project should not exceed 36 months.

The Draft Project Document should:

- provide the Malaysian and Danish Governments with a sufficient basis for deciding whether the project should be included in the DANCED portfolio of projects in Malaysia: and

The Draft Project Document should support activities comprising (but not limited to) the following and any other areas identified during the period of this assistance:

- Review and assess the capacity and capability of the Wildlife Department and assess the need for human resources development;
- Development of working plans for all districts and selected Wildlife Reserves;
- Development of a 3-year working plan for an oceanic section assess the need for human resources development necessary to implement this plan;
- Planning of a biodiversity training centre including course curricula and schedules;
- Establishment of a nature education policy for the Wildlife Department and initiate the activities included therein.
- Development of a land use plan / management plan for the Lower Kinabatangan Wildlife ;
- Development of a habitat management system for the Tabin Wildlife Reserve to be extended to other areas under the jurisdiction of the Wildlife Department.

The outreach of the assistance to the Wildlife Department / Ministry of Culture, Environment and Tourism in the preparation of a project document is to develop a project implementation strategy in the context of the policy framework for the department and to discuss the needs for technical assistance and commitments of the Government of Sabah to the implementation of a Capacity Building project in the Wildlife Department / Ministry of Culture, Environment and Tourism for further discussions with the Economic Planning Unit and DANCED.

2.Objective:

The overall objective of the mission is:

Assist the Wildlife Department of Sabah to produce a Project Document for submission to DANCED regarding a 'Capacity Building for the Wildlife Department' project in accordance with the DANCED requirements as laid down in the Project Management Manual

(Preparation) ver 01 – for the possible inclusion in DANCED's Malaysia program 1999

3.Outputs:

The outputs of the mission are:

- A report containing a short description of tasks undertaken, any lessons learnt and and problems encountered including any actions taken to mitigate the problems, the itinerary of activities, minutes of meetings etc.

4.Activities:

The scope of work for the consultancy will include, but not necessarily be limited to the following tasks:

- Assist the Wildlife Department on reviewing and assessing the existing situation – the infrastructure , human resources and the institutional set-up in the Wildlife Department;

The scope of work will include but not necessarily limited to the following tasks:

- assist the Wildlife Department / Ministry of Culture, Environment and Tourism in reviewing and assessing the existing situation – the infrastructure, human resources and the institutional set-up in the Environmental Conservation Department;
- assist the Wildlife Department / Ministry of Culture, Environment and Tourism in the assessment and identification of the necessary technical inputs and training assistance to be provided by Government of Malaysia and DANCED;
- to assist the Wildlife Department / Ministry of Culture, Environment and Tourism in development of a project implementation strategy, including the need for inputs form DACED and Government of Malaysia,
- to assist the Wildlife Department / Ministry of Culture, Environment and Tourism in preparation of a Draft Project Document in DANCED Standard format (DANCED Project Management Manual – Project Preparation Version 1.0) on "Capacity Building the Wildlife Department" including:
 - a problem analysis, a project strategy including project justification;
 - development and immediate objectives;
 - outputs, activities, inputs, including a detailed budget stating Government of Malaysia and DANCED input in terms of staff allocation and expatriates, equipment and other costs (in Kroner);
 - project organization, including responsibilities, lines of communication and job-descriptions for any key personnel;
 - activity and staff schedules;
 - critical assumptions and risks,
 - organizational and financial sustainability;
 - indicators and means of verification;

- means of project review, reporting, evaluation, accounting and auditing and plan of implementation (re.: DANCED Project Management Manual – Project Implementation (version 1.0 – 1997)).
- assist the Wildlife Department / Ministry of Culture, Environment and Tourism in the assessment of the capacity and commitment of the Wildlife Department to provide the necessary inputs and support to the implementation of the proposed project;
- Advise on potential environmental impact and studies/remedies necessary to deal with it,
- assist the Wildlife Department / Ministry of Culture, Environment and Tourism in the preparation of a plan for further activities aiming to finalize the Draft Project Document for inclusion in the DANCED-Economic Planning Unit Program for 1998

5. Staffing:

The team shall be given 1.5 man-months of consultancy assistance consisting of 2 advisors to be stationed at the Wildlife Department, Kota Kinabalu, to assist the department in preparation of a draft Project Document. The assignment includes necessary working days to assist the Wildlife Department in the finalisation of the draft Project Document.

Team Leader	University degree in natural sciences or similar.
Experience	Proven experience in project formulation or management
Language	Fluency in oral and written English. Knowledge of Bahasa Melayu

Editor/English tutor

Degree in English education or a working experience that is deemed to give same qualification. (Journalism, writer, editor or similar)

6. Timing and Duration of the Assignment:

The mission will be given 1.5 man-month from dd/mm 1999 – dd/mm 1999 to assist the Wildlife Department on the preparation of the draft Project Document including the finalisation of the draft Project Director after receipt of comments from DANCED and the Economic Planning Unit.

7. Reporting:

- The mission will present the mission report to DANCED upon completion of the term.
- The report shall be in English.
- The mission shall provide secretarial support and word processing facilities themselves.
- Final report to be delivered in five copies.

8. Inputs:

DANCED will provide all relevant reports included in the scope of work. The mission will work in close collaboration with the staff of the Wildlife Department, Federal and State Economic Planning Unit and other relevant agencies during the mission.

9.Attachments:

- DANCED Project Management Manual – Project Preparation Version 1.0
- DANCED Project Management Manual – Project Implementation (1997)
- Project Idea Description – Capacity Building for the Wildlife Department