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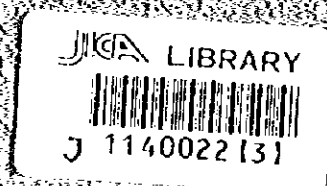
Ministry of Natural Resources
Republic of Malawi

**FINAL REPORT
OF
THE MASTER PLAN STUDY
ON
SUSTAINABLE MULTIPLE-USE
RESOURCE MANAGEMENT
OF
NKHOTAKOTA WILDLIFE RESERVE, MALAWI**

January 1997

Japan Overseas Forestry Consultants Association (JOFCA)

Pasco International Incorporated



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Japan International Cooperation Agency (JICA)

Ministry of Natural Resources
Republic of Malawi

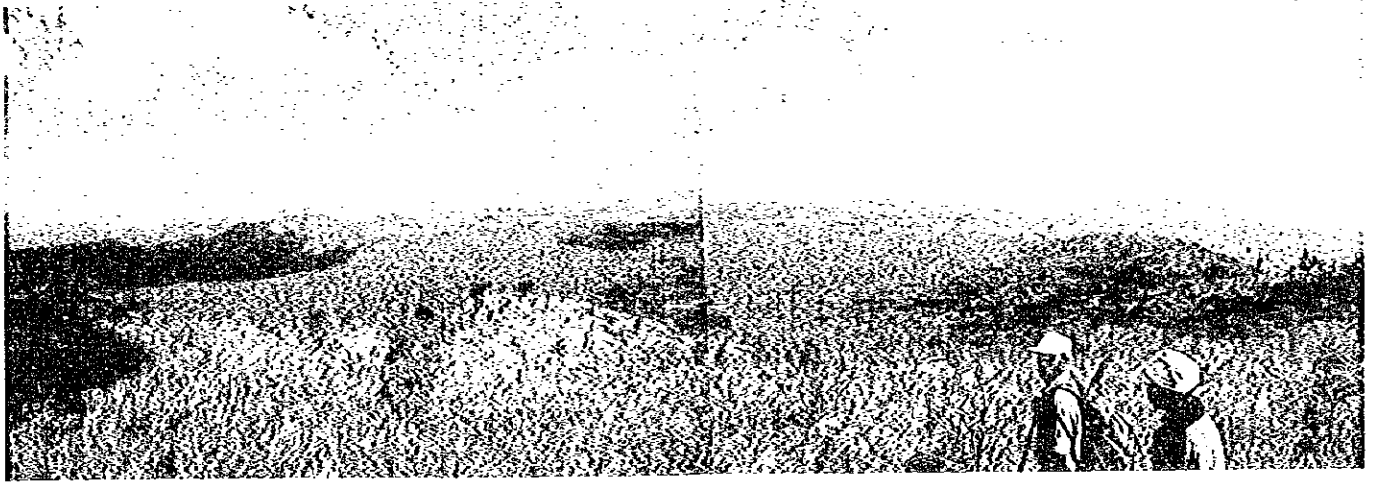
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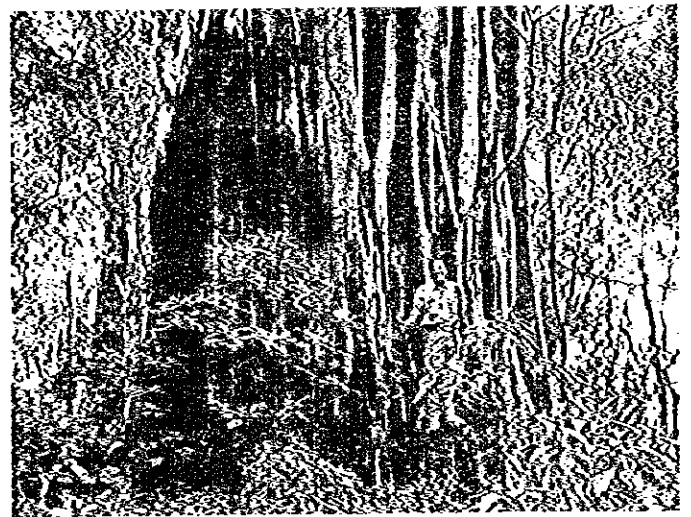
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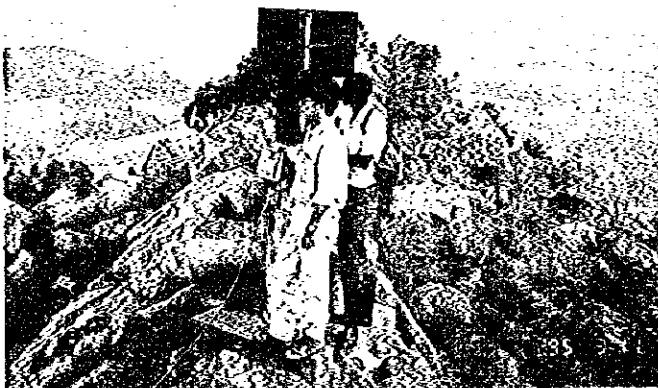
Miombo forests expanding in the southeast of the Reserve (from midslope of Mount Chipata)



Mount Chipata (evergreen broad-leaved forest)



Tree in the evergreen broad-leaved forest at Chipata Mountain (*Ficus natalensis*)



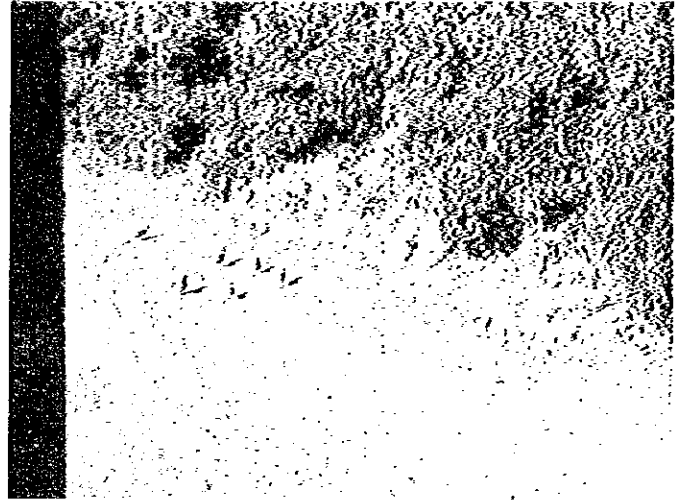
Summit of Mount Chipata



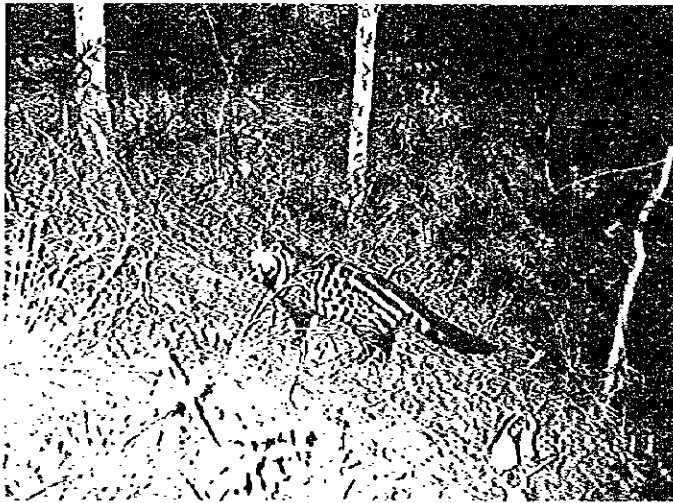
Miombo forest



Understorey vegetation survey



Aerial animal survey (a herd of waterbucks)



Animal survey using automatic photography (civet)



Social analysis survey (interview to local people)



Sale of fuelwood and charcoal in a village along the M5 road



Improved furnace (in Dedza)



Workshop (Plenary meeting)



Workshop (Sub-committee meeting)



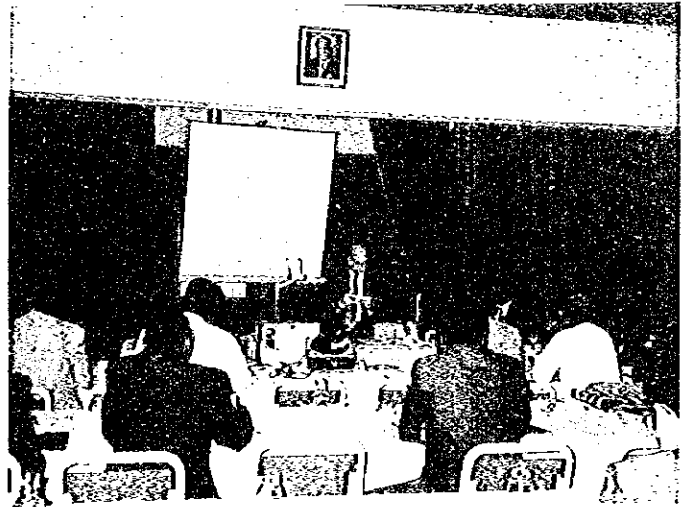
Field verification of provisional plan at the proposed reservoir construction site near the Chipata Visitors' Camp



Field verification of provisional plan at Chipata Visitors' Camp



Technology Transfer Seminar



Technology Transfer Seminar

LAND COVER CLASSIFICATION MAP

NKHOTAKOTA Wildlife Reserve and the Surrounding Area



LAND COVER CLASSES

- Woodland 1
- Woodland 2
- Forestation
- Grassland
- Wet Grassland
- Grassland/ Buried Vegetation
- Agriculture 1
- Agriculture 2
- Barren/ Bareland
- Major Settlement
- Minor Settlement
- Water
- Cloud

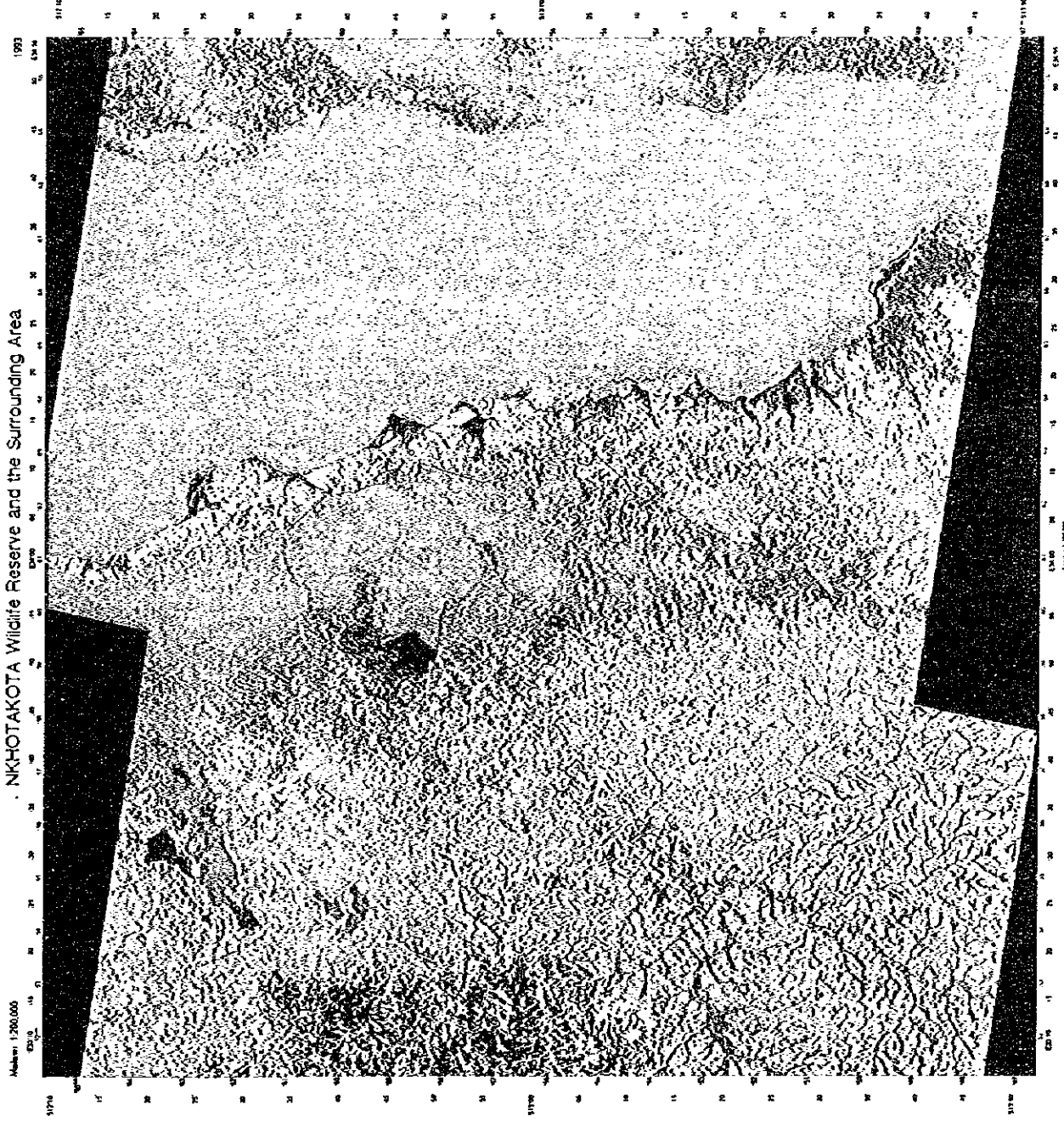
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 SRTM 30m
 2000
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 The map was prepared using the following data:
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Scale 1:100,000
 Date of Completion
 10/10/2000
 Prepared by
 JICA
 1-1-1, Kasumigaoka
 Chiyoda-ku, Tokyo 100-8501
 1000-1000-1000

10/20/04

10/20/04

LAND COVER CLASSIFICATION MAP NKHOTAKOTA Wildlife Reserve and the Surrounding Area



LAND COVER CLASSES

- Woodland 1
- Woodland 2
- Reforestation
- Grassland
- Wet Grassland
- Grassland/Barbed Vegetation
- Agriculture 1
- Agriculture 2
- Barren/Barrenland
- Major Settlement
- Minor Settlement
- Water
- Cloud

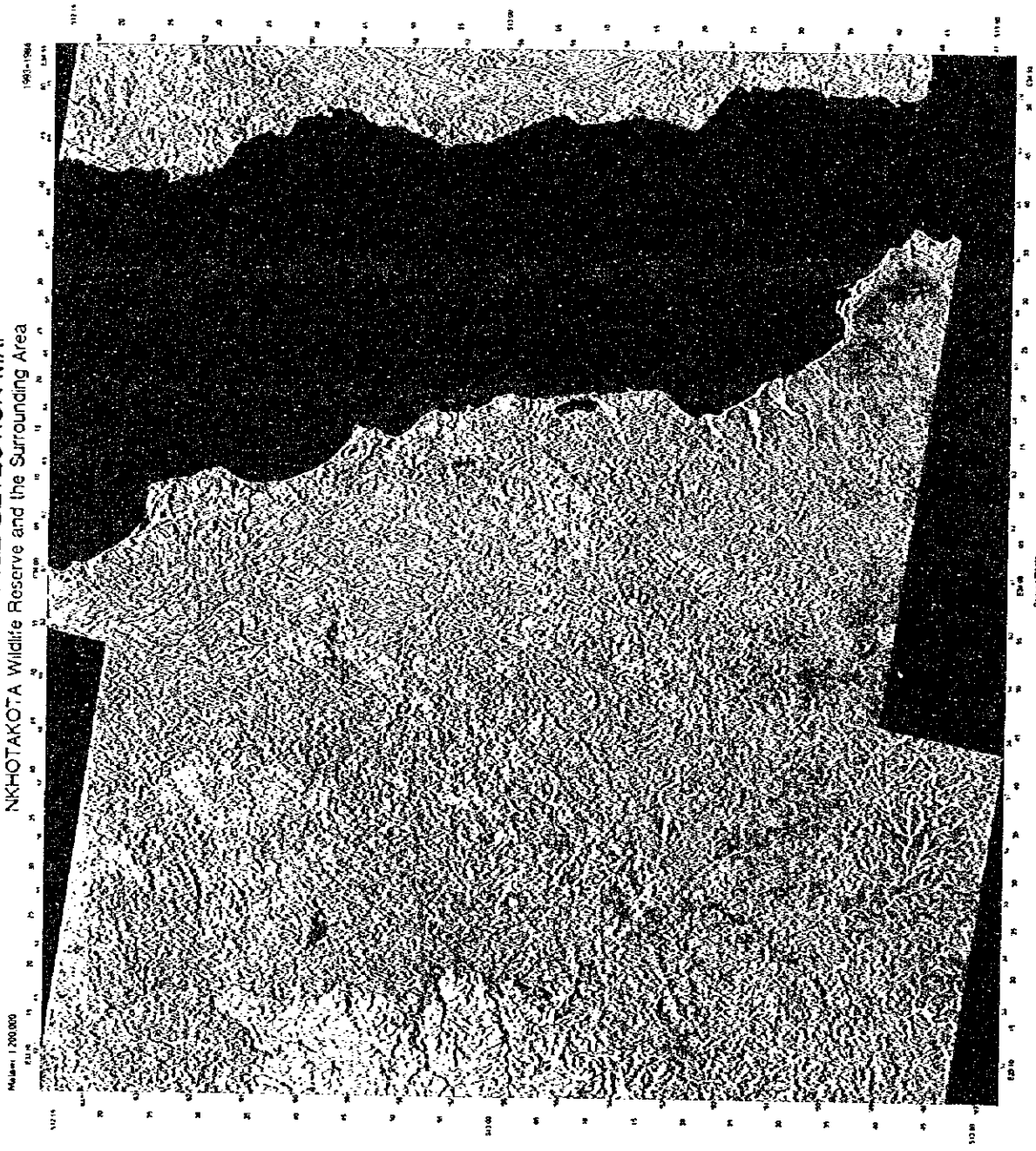
The land cover classification was derived from the following sources:
 SRTM 30m
 Landsat TM
 12/1999
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 12/2009
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 12/2011
 12/2012
 12/2013
 12/2014
 12/2015
 12/2016
 12/2017
 12/2018
 12/2019
 12/2020

Map Commissioned by
 Ministry of Natural Resources
 and Environmental Conservation
 Kampuchea
 10/20/04

Scale: 1:200,000



LAND COVER CHANGE DETECTION MAP NKHOTAKOTA Wildlife Reserve and the Surrounding Area

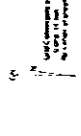


LAND COVER CHANGE CLASSES

- Weald to Grassland
- Weald to Agriculture
- Weald to Barren/Bareland
- Grassland to Wealdland
- Grassland to Agriculture
- Grassland to Barren/Bareland
- Agriculture to Wealdland
- Agriculture to Grassland
- Agriculture to Barren/Bareland
- Wet Grassland to Grassland
- Wet Grassland to Agriculture
- Agriculture to Wet Grassland
- Agriculture to Rehabilitation
- Major Settlement
- Minor Settlement
- No Change

The land cover change detection results are shown in the following table.

Change	1984-1993	1993-1994
Major Settlement	104.56	104.56
Minor Settlement	104.56	104.56
No Change	104.56	104.56
Agriculture to Rehabilitation	104.56	104.56
Agriculture to Wet Grassland	104.56	104.56
Wet Grassland to Agriculture	104.56	104.56
Wet Grassland to Grassland	104.56	104.56
Agriculture to Barren/Bareland	104.56	104.56
Grassland to Barren/Bareland	104.56	104.56
Grassland to Agriculture	104.56	104.56
Weald to Barren/Bareland	104.56	104.56
Weald to Agriculture	104.56	104.56
Weald to Grassland	104.56	104.56



PREFACE

In response to a request from the Government of the Republic of Malawi, the Government of Japan decided to conduct a master plan study on the Sustainable Multiple-use Resource Management of Nkhotakota Wildlife Reserve and entrusted the study to Japan International Cooperation Agency (JICA).

JICA sent to the Republic of Malawi a study team headed by Mr. Hiroji Okabe, Japan Overseas Forestry Consultants Association, five times during the period from February 1995 to January 1997.

The team held discussions with the officials concerned of the Government of the Republic of Malawi, and conducted field surveys in the study area. After the team returned to Japan, further studies were made and the present report was prepared.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of the Republic of Malawi for their close cooperation extended to the team.

January, 1997



Kimio Fujita

President

Japan International Cooperation Agency

January 1997

Mr. Kimio Fujita
President
Japan International Cooperation Agency
Tokyo, Japan

Dear Mr. Fujita,

Letter of Transmittal

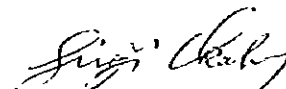
We are pleased to submit to you the Report of Master Plan Study on Sustainable Multiple-use Resource Management on the Nkhotakota Wildlife Reserve of the Republic of Malawi. The report contains the advice and suggestions of the authorities concerned of the Government of Japan and your Agency as well as the formulation of the above mentioned project. Also included are comments made by the Ministry of National Resources of the Government of the Republic of Malawi during technical discussions on the draft report which were held at Kambiri Hotel, Sarima District.

The report recommends sustainable multiple-use and resource management in Nkhotakota area, and the study team is sure that most of the recommendation of this report will be applicable in other wildlife reserves in the Republic of Malawi.

In view of the urgency of sustainable multiple-use resource management in Nkhotakota area, we recommend that the Government of the Republic of Malawi implement this Project as a top priority.

We wish to take this opportunity to express our sincere gratitude to your Agency, the Ministry of Foreign Affairs, Ministry of Agriculture, Forestry and Fisheries, and Forest Agency and Environment Agency. We also wish to express our deep gratitude to the Ministry of Natural Resources and other authorities concerned of the Government of the Republic of Malawi for the close cooperation and assistance extended to us during our investigations and study.

Very truly yours,


Hiroji Okabe
Team Leader

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**THE MASTER PLAN STUDY
ON
SUSTAINABLE MULTIPLE-USE
RESOURCE MANAGEMENT
OF
NKHOTAKOTA WILDLIFE RESERVE, MALAWI**

- EXECUTIVE SUMMARY -



Executive summary

1. Preface

The government of the Republic of Malawi (hereinafter referred to as "Malawi") requested the government of Japan to cooperate in preparing the Sustainable Multiple-use Resource Management Plan of Nkhotakota Wildlife Reserve in September, 1991. This request came in response to the situation which urgently requires immediate preparation of a sustainable multiple-use resource and management master plan for Nkhotakota Wildlife Reserve (hereinafter referred to as "the Reserve) and its surroundings which will take the life of local residents into consideration.

In April, 1994, the Japan International Cooperation Agency (hereinafter referred to as "JICA") dispatched a preliminary study team for a sustainable multiple-use resource management plan for Nkhotakota Wildlife Reserve in order to survey general conditions and to understand details of cooperation and also to hold discussions with Malawian officials. Based on the result of the preliminary study, JICA dispatched another study team for a sustainable multiple-use resource management plan for the Reserve in October, 1994. Scope of Work was signed after the team conducted field surveys concerning details and methods of wildlife surveys, details and methods of social analysis surveys, and details of a sustainable multiple-use resource management plan, and also consulted with Malawian officials.

Following the procedure described above, surveys were conducted by a joint venture between Japan Overseas Forestry Consultants Association (hereinafter referred to as "JOFCA") and Pasco International Co. The first survey was conducted in February, 1995 and so far four surveys have been conducted. In addition, domestic workshops were held before and after the field survey.

2. Objectives of framing a sustainable multiple-use resource management plan

Objectives of the surveys are to understand the present conditions of natural resources in the study area, general conditions of villages surrounding the Reserve, and the degree of dependency of inhabitants of surrounding villages in the Reserve in order to prepare a sustainable multiple-use resource and management plan that will control sustainable multiple-use of natural resources.

3. Necessity of framing a sustainable multiple-use and resource management plan

Malawi is subject to variable weather conditions due to its complex topography. This is the reason a variety of faunas and floras exist in national parks and wildlife reserves across the country. Such diversity of flora and fauna contributes not only to the national economy but also to fields of science and education. Especially, in Lake Malawi, there live various kinds of indigenous fish.

Therefore, objectives of national parks and reserves are: to scientifically control such valuable resources to be sustained, to preserve the ecology of wildlife, to protect indigenous species, to maintain the most appropriate amount of resources in accordance with land use, and to utilize resources sustainably.

The population of Malawi is increasing at the rate of more than 3 percent per year and Malawi has become one of the most densely-populated area in Africa. Since there is almost no key industry other than agriculture, forests have been cultivated for agricultural use in order to support the rapidly increasing population. The population in Nkhotakota area has been increasing more rapidly than average population increase rate in the nation, resulting in further cultivation of forests and increasing demand for further utilisation of resources in the Reserve.

The Reserve was founded to protect diverse flora and fauna and at the same time to function as a control system of the water of rivers that flow into Lake Malawi. This is also a place where lake salmon spawn their eggs. Therefore, it is important to assure these functions by planning sustainable use of natural resources with participation of local residents and to ease the demand for further land use within the Reserve. Preparation of a master plan to achieve these objectives is therefore urgently required.

4. Consideration taken in field surveys

Field surveys were conducted with special considerations as described below.

The study team directly consulted with government institutions concerned, such as Department of National Parks and Wildlife (hereinafter referred to as "DNPW") in the Ministry of Natural Resources, while it conducted surveys in order to obtain perspectives of the Malawi Government. The team also deepened its understanding of the Government's views through workshop and exchanged opinions with DNPW after conducting the joint field survey regarding an interim plan.

Furthermore, members of the study team contacted local residents in order to understand their intention. The team conducted a survey on fish and analyzed conditions of the society through subcontract. In addition, it obtained local residents' views through the workshop above mentioned.

Members of the study team visited the villages as often as possible in order to

understand actual conditions, and transferred effective techniques to the staff at DNPW while they conducted surveys.

5. Range of survey

1) Study area

Malawi Government and JICA agreed that the range of survey would be inside the Reserve and surrounding areas outside the Reserve within approximately 10 km from the boundary of the Reserve. Forest reserves as well as plantations were excluded from the survey.

Since the area to be surveyed would be the area subject to a sustainable multiple-use and resource management plan, the above decision was made with utmost caution. After interviewing local residents about local situations, discussing the border between areas to be surveyed and those not to be surveyed, consulting with DNPW, and interviewing District Commissioners concerned, the decision was made that the area to be surveyed would include surrounding areas within approximately 10 km from the boundary of the Reserve and national forest reservation and plantations owned by Dwangwa Sugar Public Corporation would be excluded from the survey. In result, the study area totals approximately 400,000 ha consisting of approximately 180,000 ha in the Reserve and approximately 220,000 ha in surrounding areas.

2) Major survey activities

(1) Survey of flora and fauna in the Reserve

i. Survey of major animals in the Reserve

The study was conducted through both a ground survey and an aerial survey using helicopters to obtain the number, density, and distribution of major animals in the Reserve. The study found that the number of major wild animals in the Reserve was smaller than expected.

ii. Forest resources in the Reserve

The study team surveyed forestry in order to obtain the total amount of stand volume of miombo forest and dead tree volume, to understand species that form forestry, to estimate the amount of grasses in the forest and the amount of fodder plants in woodland, and to study medicinal plants. As a result, it was found that the amount of fodder plants was well over the amount required for animals in the Reserve throughout the year. It was also found that there were a great deal of medicinal plants.

(2) Survey of facilities and staff related to the management of the Reserve

i. Facilities

The survey was conducted to understand present conditions and to design measures for maintenance of facilities necessary for administration of the Reserve, such as scout camps, visitor centres, roads, etc.

As a result, it was found that construction of new facilities and improvement of existing facilities were both required.

ii. Staff

The survey was conducted to obtain the number of staff in charge of the administration of the Reserve and to collect information concerning living conditions of those employees. It was found that the number of staff should be increased due to the future improvement and building of facilities as described above and that living conditions should be improved.

(3) Social analysis of surrounding areas

Since it is essential for local residents to participate in the plan in order to successfully carry out a sustainable multiple-use and resource management plan, social conditions of surrounding areas should be analyzed. Therefore, social items, such as the lifestyle of residents, their needs, and their relationships with the Reserve were surveyed and analyzed.

As a result, it was found that smallholders around the Reserve lived with low incomes in a poor social environment. For instance, many children cannot go to school because their homes are remote. Residents cannot go to a hospital for sufficient medical treatment also because their homes are remote. Although local people strongly wish to use resources available in the Reserve, they do not have the intention of poaching animals by themselves.

(4) Survey of social forestry

Conditions of miombo forests that have provided residents around the Reserve with fuelwood have deteriorated significantly due to rapid agricultural cultivation and extended gathering of fuelwood for households. Some part of the forests has started to not provide enough fuelwood because of such deterioration. Therefore, it is necessary to enlarge provision of fuelwood through social forestry including improvement of heat efficiency. A study of social forestry was conducted.

As a result, two accessible villages were selected for planning a model project on the east and west sides of the Reserve. The project is designed to supply fuel to households and to improve the thermal efficiency of fuel.

(5) Surveys regarding improvement measures for the standard of living of local residents

Surveys were conducted regarding improvement measures for the standard of living of local residents, because the standard of living significantly affects the degree of dependency of local residents on the Reserve.

As a result, examination was carried out on implementation of various measures to improve the income level of farms through agroforestry, including small animal farming, vegetable cultivation, fish breeding, and bee-keeping; on the assumption that such improvement would facilitate the conservation of

resources in the Reserve.

(6) Preparation of a sustainable multiple-use and resource management provisional plan

As a preliminary plan, a sustainable multiple-use and resource management provisional plan was prepared in order to examine feasibility of the plan in the study area. Based on this examination, a sustainable multiple-use and resource management plan was prepared.

(7) Other surveys

i. Survey of fish

The area within of the Reserve provides lake salmon, a precious resource in the region, with a good place for spawning. Indiscriminate fishing has recently become a problem outside the Reserve. Therefore, surveys were conducted to understand present conditions of fish resources and utilisation of fish by local people in order to lead to sustainable utilisation of resources.

According to the results of the survey, 35 species of fish in 9 families were identified. Of them, 18 species fall under Cyprinidae and 8 species under Cichiriidae. In the survey of fish use, the majority of fishermen replied that catches decreased due to droughts, excessive fishing and the increasing population. They do not have much knowledge regarding fishes.

ii Field inspection

Field inspection was conducted in order to draw a vegetation and land utilisation map, and a land cover transition map.

iii Workshops

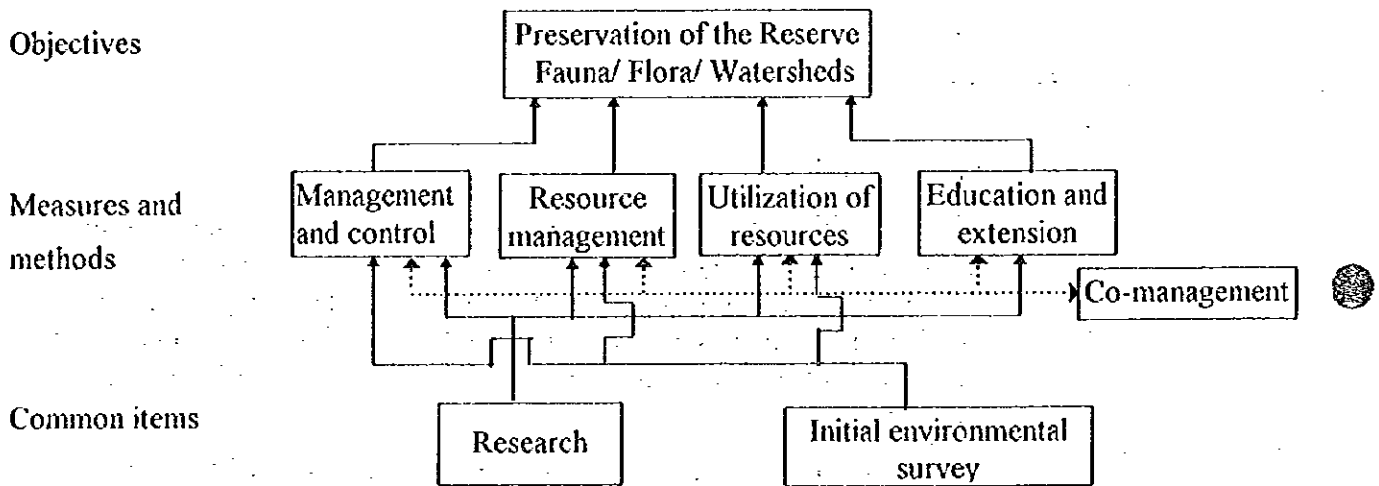
Workshops were held in order to understand perspectives of local residents and governmental institutions concerned as well as to promote the necessity of preservation of the Reserve and to inform the people concerned of the progress of the current survey.

iv. Initial environmental survey

This survey was conducted to examine the plan's impact on environmental conditions. It was found that there had been almost no impact on environment and that even though there was some impact, it was minimal, since activities themselves were to prepare a sustainable multiple-use and resource management plan.

6. Overview of a sustainable multiple-use and resource management plan

The objective of a sustainable multiple-use and resource management plan is to preserve resources in the study area. It is composed of methods and measures, various surveys and research to support them, and preliminary environmental survey. The chart below shows the structure of the plan.



The Structure of a Sustainable Multiple-use and Resource Management Plan

Measures to preserve the Reserve are composed of management and control of the Reserve, sustainable utilisation of resources, resource management, and education of local residents and propagation of importance of the Reserve and necessity of preservation of the Reserve. These measures and methods should be implemented following the guiding principle of co-management. As a basis for these activities, various research and preliminary environmental survey are also included.

Measures for surrounding areas are intended to secure household fuel and improve access roads to the Reserve. In addition, agricultural measures are a prerequisite for conserving the resources of the Reserve.

(1) Initial environmental survey

Initial environmental survey examine how the plan will affect environment before the plan is actually carried out. As for management and control of the Reserve, there is no environmental problem, since the plan itself aims mainly at conservation of the natural environment. In terms of resource utilisation and education and extension, almost no environmental problems arise, since the goal of the plan itself is to prepare a sustainable multiple-use and resource management plan. Even if minimal impact on environment was to be found, it would be little enough to be corrected. Thus, a sustainable multiple-use and resource management plan was prepared based on the results of such preliminary environmental survey.

(2) Points to be considered in carrying out the plan

Since the plan covers a wide variety of measures, it is impossible for DNPW alone to execute all these measures. Successful execution requires cooperation of many governmental organizations, since this is a comprehensive plan that necessitates funds, technology, human resources, and know-how that each institute can provide. Therefore, it is required that DNPW set up a committee to carry out the plan and a liaison conference consisting of representatives from governmental organisations concerned in order to carry out the plan efficiently and smoothly.

The plan requires, at certain points of its execution in the Reserve and its surrounding areas, technical instruction from experts in the field. It also requires grassroots leadership on the part of local residents in order for them to carry out measures concerning them.

(3) Management of the Reserve

Zoning is the groundwork for management for the Reserve. The plan adopted the existing zoning system with a few changes in locations of scout camp sites and visitor camps to be newly built.

It was planned to build two scout camps and to increase scout staffs in order to reinforce preventive measures against poaching and to strengthen the management of the Reserve. In addition, plans were designed to improve patrolling facilities, to improve and expand the information system, and to improve facilities of scout camps grounds in order to enhance both the morale of scout members and the living environment.

(4) Resource management in the Reserve

Resources in the Reserve can be divided into three categories; that is, tourism resources, animal resources, and plant resources.

The nature in the Reserve that attracts eco-tourism is one of tourism resources, but this depends significantly on preservation of other resources, since the natural environment can be maintained only through preservation of animal and plant resources in the Reserve.

The most important issue concerning preservation of animal resources is how to increase the number of animal resources in the Reserve. In order to achieve this, participation of local people in the reserve management and efficient management operations are required. Major measures to increase the number of animal resources are to reinforce preventive measures against poaching and to preserve animal habitats. Although it is important to preserve animal species, no particular mammal species, in the Reserve needs a special protection at this stage. One option for resource utilisation is safari-hunting. This activity, however, requires additional surveys, concerning biological aspects, as well as public acceptance and concession management. As for fish, it is considered desirable to preserve them while utilizing them under certain conditions with understanding and participation of local people.

Plant resources in the Reserve consist mainly of forest, primarily miombo and to a lesser extent evergreen broad leaved forests. Preserving miombo forests as the most important animal habitat is essential as it is one way of increasing animal numbers. Preservation of evergreen forest is equally important due to their high ecological value.

(5) Resource utilisation

Among resource utilisation in the Reserve, utilisation of tourism resources is considered to be a non-consumptive way of utilising the resources. Therefore, expecting further development in this area, completion of visitor centres, camping sites, and facilities for eco-tourism were designed. Especially, eco-tourism that utilizes tourist resources without damaging the ecosystem in the Reserve is an important method of resource utilisation. Although the number of eco-tourists is not large at present, it is expected to increase due to completion of National Route M10, and other facilities listed above. Such an increase of tourists will provide working opportunities around the Reserve.

Animal resources have not been much utilised except for vertebrate pests to be controlled, since the density of animal's in the Reserve is low as described before. As for fish, fishing for the purpose of fish stock management mentioned above can be partly considered as resource utilisation.

As for utilisation of forestry resources, measures that might change the ecosystem of the Reserve cannot be accepted. Therefore, resources to be utilised are limited to dead trees, mushrooms, grass, medicinal plants, fruits, and honey. Utilisation of dead trees contributes significantly to the region by providing firewood until forest resources come to full existence. Since resources mentioned above, such as mushrooms, grass, medicinal plants, fruits, and honey, are essential to local people, utilisation of these resources should be allowed as long as it doesn't damage the ecosystem of the Reserve.

(6) Measures for surrounding areas

The reason why there is a demand for utilisation of resources in the Reserve is that there is no other way than to depend on resources inside the Reserve because of the low standard of living of local people and exhaustion of customary forests. Therefore, in order to carry out a sustainable multiple-use resource management in the Reserve, it is required to improve the standard of living and to establish a stable system of providing fuelwood for households.

To improve the standard of living of local people, it is necessary to build infrastructure that will stabilize basic living conditions. On the other hand, to improve the standard of living of local farmers, measures to raise average income as well as to improve dietary habits are required.

From present conditions, it is obvious that in some part of the surrounding areas significant shortage of fuelwood occurs because customary forest resources will be exhausted within a short period of time. Therefore, it is necessary to immediately establish a system to provide fuelwood by promoting social forestry. There are two measures to be taken to provide stable supply of fuelwood. One

is to produce enough wood by planting trees and extending customary forests and the other is to economize the consumption of fuelwood through enhancement of heat efficiency. The plan sets up two model areas to instruct efficient use of resources, with the expectation that the result of social forestry will spread throughout the region. Since fuelwoods are essential material for everyday cooking, it is hoped that many women will willingly participate in activities.

(7) Extension and education

To preserve flora and fauna in the Reserve, cooperation of local people is essential. So it is important to have them recognize the importance of the Reserve as well as to provide them with some rewards for their cooperation. Therefore, extension and education of local people should be carried out and it is hoped that the importance of the Reserve will be taught at school.

(8) Research

In order to realize sustainable multiple-use and resource management in the Reserve, the following items should be studied: present conditions of natural resources in the Reserve, population dynamics of wild animals, stock change of fish, the present status of rare plants, desirable habitats for animals, protective measures against poaching, and breeding measures. The data obtained through this research should be carefully analysed. It is also necessary to consider the introduction and breeding of rare animals annihilated in Malawi (e.g., black rhinoceroses) in light of the environment and animal habitats in the Reserve. Moreover, study of perspectives of local people regarding the Reserve is also required.

7. Budget

The total expense for implementing the master plan for sustainable multiple-use and resource management is as follows. It does not include running costs.

Summary of Operating Expenses

in US 1,000

Category	Major Items	Expenses for Facilities & Equipment	Operating Expenses	Administrative Expenses	Total
Reserve management & Operation	Access, Bridge, Scout housing, Office and other facilities, Scout equipment, Office equipment, etc.	3,865		1,969	5,834
Reserve Resource Management	Electric fences, Forest resource management	408	12	56	476
Resource Use	Buildings and equipment for Bua and Chipata Visitors' Camps, Equipment for surrounding areas	4,593	1,558	47	6,198
Social Forestry	Forestation, Natural forest practice, Furnace improvement and prevalence	416	258	43	717
Research	Animal resources, Plant resource, Others	63	123	1,075	1,261
Extension & Education	Survey of local needs, Extension & education, Guide training, Preparation of signs and notices, Preparation of various types of material.	66	118	538	722
Total		9,411	2,069	3,728	15,208

8. Effects of a sustainable multiple-use and resource management plan

The items listed below are major effects of the plan to preserve in good condition the flora and fauna resources in the largest wildlife reserve in the country and will enable the citizens of Malawi to hand over such precious resources to future generations in the 21st century.

- ① The implementation of the plan will create employment opportunities in the vicinity of the Reserve for a long time.
- ② Measures for local people will improve infrastructure, the level of income and the status of women.
- ③ Reinforced measures against poaching and enhanced morale of scouts will facilitate the conservation of good habitats for animals, which will eventually increase animal resources.
- ④ The provision of meat of vertebrate pests from DNPW and the permission for fishing to utilise resources within the limits of conserving the ecosystem of the Reserve will facilitate their participation and cooperation in implementing the plan.
- ⑤ Forest conservation will provide good habitat for wildlife and maintain the spawning grounds for lake salmon.
- ⑥ Ecotourism will provide job opportunities for the local people and generate government revenue. It also leads to people's awareness of nature

conservation.

- ⑦ Implementation of social forestry will provide demand and supply of fuelwood and the extension of social forestry will decrease the pressure that demands further use of forest resources in the Reserve.
- ⑧ Education and extension will help local people recognize the importance of the Reserve, which will lead them to take part in the plan.
- ⑨ Research in the Reserve will help efforts to grasp the current state of the resources and will supply basic data necessary for desirable sustainable multiple-use and resource management.

ABBREVIATIONS

ADMARC	Malawi Agricultural Development Marketing Corporation
APWO	Assistant Parks and Wildlife Officer
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
DNPW	Department of National Parks and Wildlife
JICA	Japan International Cooperation Agency
JOFCA	Japan Overseas Forestry Consultants Association
NGO	Non-governmental Organization
PWA	Parks and Wildlife Assistant
SADC	Southern African Development Community
SPWA	Senior Parks and Wildlife Assistant
STA	Subtraditional Authority
SW	Scope of Work
TA	Traditional Authority
UN	The United Nations
UNESCO	The United Nations Educational, Scientific and Cultural Organization