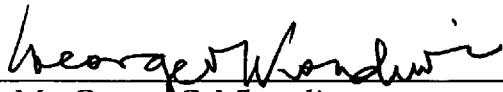


3. 実施細則 (Scope of Work)

SCOPE OF WORK
FOR
THE MASTER PLAN STUDY
ON
AQUACULTURE DEVELOPMENT
IN MALAWI

AGREED UPON BETWEEN
MINISTRY OF NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS
AND
JAPAN INTERNATIONAL COOPERATION AGENCY


LILONGWE, SEPTEMBER 16, 2002



Mr. George C. Mkondiwa
Principal Secretary
Ministry of Natural Resources and
Environmental Affairs
MALAWI



Mr. Takashi Mizuno
Team Leader
Preparatory Study Team
Japan International Cooperation
Agency
JAPAN



Mr. Ambrose Mzoma
Deputy Director-Debt and Aid Management
Ministry of Finance and
Economic Planning
MALAWI

I. INTRODUCTION

In response to the request of the Government of Malawi, the Government of Japan has decided to conduct the Master Plan Study on Aquaculture Development in Malawi (hereinafter referred to as "the Study") together with the Government of Malawi in accordance with the relevant laws and regulations in force in Japan.

Accordingly, the Japan International Cooperation Agency (hereinafter referred to as "JICA"), the official agency responsible for the implementation of the technical cooperation programs of the Government of Japan, will undertake the Study in close cooperation with the authorities concerned of the Government of Malawi.

The present document sets forth the Scope of Work with regard to the Study.

II. OBJECTIVES OF THE STUDY

The objectives of the Study are

1. To formulate a national aquaculture development plan (master plan) for sustainable development of fisheries in Malawi; and
2. To transfer relevant technology to the Malawi counterpart personnel through on-the-job training in the course of the Study.

III. OUTLINE OF THE STUDY

1. Study Area

All water bodies in Malawi; namely Lake Malawi, Lake Malombe, Lake Chiuta, Lake Chilwa and all rivers, dams and small water bodies, and inland areas.

2. Scope of the Study

In order to achieve the objectives above, the Study shall consist of the following activities.

- (1) To clarify the situation of aquaculture by reviewing fisheries in Malawi

Main activities are as follows:

- 1) Data collection and analysis, and extensive field survey on the following aspects:

(a) General situation:

- a) Natural conditions (topology and geography, meteorology, water resources, soil condition, vegetation, etc.)
- b) Social and economic conditions (population, education, health, transport and communications, energy provision, economic structure, etc.)
- c) Agriculture and animal husbandry (production, technology, and

- management)
- d) Fisheries sector (production, processing and marketing, etc.)
- (b) Situation of fisheries resources management:
 - a) Communities and organizations in resources management
 - b) Fishing gear and fishing methods
 - c) Technology and method of resources management
 - d) Fishing data (fishing conditions, information collecting system, etc.)
 - e) Legislation and institution (regulations, etc.)
- (c) Situation of aquaculture:
 - a) Management and technology (fish farmers' organization, marketing, capacity building, farming technique, stock enhancement, etc.)
 - b) Economic
 - c) Training and extension programmes
 - d) Legislation and institution (regulations, by-laws, land tenure, etc.)
 - e) Environmental issues (natural conditions, IEE/EIA procedure, etc.)
- 2) Review of projects
 - Review of previous fisheries projects in general as well as aquaculture development projects
- (2) Survey of target groups for aquaculture's practice and extension
- (3) Identification of appropriate technologies and methods for target groups such as in small-holder fish farming, stock enhancement, fish preservation and floating net cage
- (4) Formulation of strategy on aquaculture development
- (5) Preparation of pilot projects
- (6) Implementation of pilot projects
- (7) Formulation of aquaculture development plan (master plan) by target groups, appropriate technologies, institutional arrangement, extension/training system, marketing, financial aspects, and environmental aspects
- (8) Selection of priority project(s)
- (9) Preparation of implementation plan of the priority project(s)

IV. STUDY SCHEDULE

The Study will be carried out during a period of approximately thirty-two (32) months, in accordance with the attached tentative work schedule (ANNEX).

V. REPORTS

JICA shall prepare and submit the following reports to the Government of Malawi:

Am

Q

- 1 Inception Report
Thirty (30) copies at the beginning of the second field work.
- 2 Progress Report
Twenty (20) copies at the end of the second field work.
- 3 Interim Report
Thirty (30) copies.
- 4 Field Report (1)
Twenty (20) copies.
- 5 Field Report (2)
Twenty (20) copies.
- 6 Draft Final Report
Fifty (50) copies. The government of Malawi will provide JICA with its comments on Draft Final Report within one (1) month after receipt of the Draft Final Report.
- 7 Final Report
Fifty (50) copies within two (2) months after receipt of the comments from the Government of Malawi on the Draft Final Report.

VI. UNDERTAKING OF THE GOVERNMENT OF MALAWI

1. To facilitate the smooth conduct of the Study; the Government of Malawi shall take necessary measures:
 - (1) To permit the members of the Japanese Study Team to enter, leave and sojourn in Malawi for the duration of their assignments therein and exempt them from foreign registration requirements and consular fees;
 - (2) To exempt the members of the Japanese Study Team from taxes, duties and any other charges on equipment, machinery and other material brought into Malawi for the implementation of the Study;
 - (3) To exempt the members of the Japanese Study Team from income tax and charges of any kind imposed on or in connection with any emoluments or allowances paid to the members of the team for their services in connection with the implementation of the Study;
 - (4) To provide necessary facilities to the Japanese Study Team for the remittance as well as utilization of the funds introduced into Malawi from Japan in connection with the implementation of the Study;

h

2

→

2. The Government of Malawi shall bear claims, if any arises, against the members of the Japanese Study Team resulting from, occurring in the course of, or otherwise connected with, the discharge of their duties in the implementation of the Study, except when such claims arise from gross negligence or willful misconduct on the part of the Japanese Study Team.
3. Department of Fisheries shall, at its own expense, provide the Japanese Study Team with the following, in cooperation with other organizations concerned:
 - (1) Security-related information on as well as measures to ensure the safety of the Japanese Study Team;
 - (2) Information on as well as support in obtaining medical services;
 - (3) Available data and information related to the Study;
 - (4) Counterpart personnel;
 - (5) Suitable office space with necessary office equipment and furniture in Lilongwe;
 - (6) Credentials or identification cards.

VII. CONSULTATION

JICA and Department of Fisheries shall maintain constant communication and consult with each other in respect of any matters that may arise from or in connection with the Study.

h.

g

— 6

TENTATIVE SCHEDULE

Months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	
The Study in Malawi		▨	▨		▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨	▨			
The Study in Japan	□							□																				□					□
Reports					△		△		△						△												△		△	◎		△	
					Ic/R		Pr/R		It/R						Fd/R(1)												Fd/R(2)		Df/R			F/R	

← Pilot Project →

- (Remarks)
- Ic/R : Inception Report
 - Pr/R : Progress Report
 - It/R : Interim Report
 - Fd/R : Field Report
 - Df/R : Draft Final Report
 - ◎ : Comments on Df/R by the Government of Malawi
 - F/R : Final Report

by -

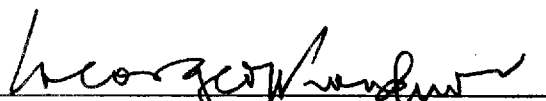
- 120 - R

R

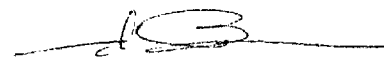
MINUTES OF THE MEETINGS
ON
SCOPE OF WORK
FOR
THE MASTER PLAN STUDY
ON
AQUACULTURE DEVELOPMENT
IN MALAWI

AGREED UPON BETWEEN
MINISTRY OF NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS
AND
JAPAN INTERNATIONAL COOPERATION AGENCY

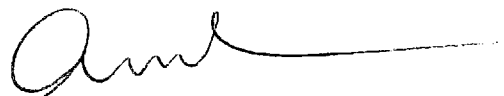
LILONGWE, SEPTEMBER 16, 2002



Mr. George C. Mkondiwa
Principal Secretary
Ministry of Natural Resources and
Environmental Affairs
MALAWI



Mr. Takashi Mizuno
Team Leader
Preparatory Study Team
Japan International Cooperation
Agency
JAPAN



Mr. Ambrose Mzoma
Deputy Director-Debt and Aid Management
Ministry of Finance and
Economic Planning
MALAWI

1. Introduction

In response to the request of the Government of Malawi, the Preparatory Study Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA"), and headed by Mr. Takashi MIZUNO, visited Malawi from 9 September to 17 September 2002 for the purpose of discussing and confirming the Scope of Work for the Master Plan Study on Aquaculture Development in Malawi (hereinafter referred to as "the Study")

The Team had a series of discussions with the Malawian officials concerned of the Ministry of Natural Resources and Environmental Affairs on the Scope of Work for the Study. The list of participants in a series of meetings is attached in the ANNEX.

As a result of discussions, the Ministry of Natural Resources and Environmental Affairs and the Team agreed on the Scope of Work for the Study.

This document sets forth the main issues discussed and agreed upon by both sides in relation to the Scope of Work for the Study.

2. Title of the Study

Both sides agreed that the title of the Study should be changed from "The Study on Fisheries Projects Review and Aquaculture Development in Malawi" to "The Master Plan Study on Aquaculture Development in Malawi".

3. Objective of the Study

The Malawian side requested that the study should develop a Master Plan for the fisheries sector to act as a framework which can guide the department on future activities for the development of fisheries industry. The Team explained that instead of developing a Master Plan for the whole fisheries sector, the Team will only develop an Aquaculture Master Plan because it has vast experience in aquaculture than capture fisheries. Both sides agreed that the objective of the Study is to formulate an aquaculture development plan.

4. Review of Fisheries in Malawi

Both sides agreed that the review process should be consultative involving exchange of opinions and experiences as well as holding seminars/workshops between the Study Team and Malawian counterparts so that the pertinent issues can be ironed out. In addition, it was recognized that although aquaculture contributes a small

proportion to total national fish production, it is nevertheless, important at rural household level in terms of food security and income. Consequently, both sides agreed that the review will cover not only aquaculture but also whole fisheries sector, and clarify the importance and necessity of aquaculture development.

5. Counterpart Agency for the Study

The Department of Fisheries shall act as counterpart agency to the Study Team during the implementation of the Study and also as a coordinating body in relation with other governmental and non-governmental organizations concerned for the smooth implementation of the Study.

6. Pilot Projects

The pilot projects will be identified through consultations and analysis of information to define the needs, and shall be decided through the discussions between both sides.

7. Assignment of Counterpart Personnel

The Malawian side will assign the counterpart personnel to the Study Team in the following fields :

- 1) Aquaculture
- 2) Fisheries Economics
- 3) Fisheries Biology
- 4) Administration and Management
- 5) Sociology
- 6) Policy and Legislation

8. Counterpart Training in Japan

The Malawian side requested that the counterpart personnel be trained in Japan as one of the activities to achieve technology transfer.

9. Office Accommodation

The Malawian side promised to provide the Study Team with a suitable office space within the buildings of Ministry of Natural Resources and Environmental Affairs and to make its best effort to provide desks, chairs, the use of internet services and one



telephone with facsimile function in the office as required, except internet/telephone bills.

10. Equipment for the Study

The Malawian side requested that the following equipment and materials for the Study be provided by JICA. The Team promised to convey the request to the JICA headquarters.

- 1) Four wheel drive vehicle
- 2) Personal Computer
- 3) Fax Machine
- 4) Photocopy Machine

11. Final Report

The Malawian side agreed that the Final Report would be open to the public.

12. Financial Support on Travel Expenses for Counterpart Personnel

The Malawian side requested that JICA consider providing financial support on travel expenses for the counterpart personnel. The Team will convey the request to JICA headquarters for consideration.

List of Participants in a series of meetings

Malawi Side

Ministry of Natural Resources and Environmental Affairs

Mr. George C. Mkondiwa Principal Secretary

Department of Fisheries

Mr. S. A. Mapila	Director of Fisheries
Mr. S. Chimatiro	Deputy Director of Fisheries (Administration)
Mr. A. Bulirani	Deputy Director of Fisheries (Technical Services)
Mr. O. M. Kachinjika	Chief Fisheries Officer (Extension and Training)
Ms. C. L. Pasani	Fisheries Officer
Mr. P. G. Ngoma	Fisheries Economist

Ministry of Finance and Economic Planning

Mr. A. Mzoma	Deputy Director (Debt and Aid Management)
Mr. D. Y. C. Wirima	Assistant Director

Japan Side

Preparatory Study Team

Mr. Takashi Mizuno	Leader
Mr. Takayuki Nishizaki	Member

JICA Malawi Office

Mr. Hiroshi Murakami	Resident Representative
Mr. Kenichi Matsumoto	Assistant Resident Representative
Mr. Keiichi Okitsu	Assistant Resident Representative
Mr. Vincent A.L.Mkandawire	Aid Coordinator

JICA Expert

Dr. Hiroki Eda	NAC, Domasi
Mr. Hiroshi Omizo	NAC, Domasi
Mr. Hiromasa Suzuki	NAC, Domasi
Dr. Shinsuke Morioka	Bunda College of Agriculture





5. 収集資料リスト

マラウイ国養殖開発マスタープラン調査（事前調査）収集資料リスト

ref.#	収集資料名	著者	頁数	備考（収集先またはドナー）	プロジェクト名	リサーチ	モニター	抜粋	電子ファイル
	水産一般								
1	Fisheries Conservation and Management Act No.25 of 1997, November 1997	DOF	38				●		
2	National Fisheries and Aquaculture Policy: Government of Malawi, October 1999	DOF	30				●		
3	Fisheries Action Plan 1999-2004	DOF	25				●		
4	Towards Responsible Development of the Fisheries Sector in Malawi, March 2000	S.A.Mapila	41	DOF			●		
5	Baseline Information for the JICA Preparatory Study Team on Fisheries and Aquaculture Development and Resource Management in Malawi, March 2002	DOF	8				●		
6	Information Collection and Review in Fisheries/Agriculture Sector Activities in Malawi, March 2002	Agricultural Policy Unit, Bunda College	6				●		
7	Capture Fisheries and Aquaculture Research, August 1999	S.A.Mapila et al.	14	DOF, FRU, NAC			●		
8	Twenty years of fisheries research in Malawi, Fisheries Bulletin, No. 7, June 1991	D.Twedde	43	DOF			●		
	漁業								
9	Demersal fish stocks in southern Lake Malawi: stock assessment and exploitation, Fisheries Bulletin, No. 35, 1997	M.C.Banda and T.Tomasson	39	DOF		●			
10	A review of biology, fisheries and population dynamics of chambo (<i>Oreochromis</i> spp., Cichlidae) in Lakes Malawi and Malombe, Fisheries Bulletin, No. 38, 1999	O.K.Palsson et al.	35	DOF		●			
11	Trawl selectivity and the effect of clogging on selectivity in standard trawl surveys in Lake Malawi, Fisheries Bulletin, No. 39, 1999	G.Z.Kanyerere	26	DOF		●			
12	Review of demersal monitoring surveys in southern Lake Malawi, Fisheries Bulletin, No. 40, 1999	O.K.Palsson et al.	19	DOF		●			
13	Annual frame survey, September 1999, Fisheries Bulletin, No. 42, 2000	O.L.F.Weyl et al.	56	DOF					●
14	Spatial and temporal distribution of some commercially important fish species in the southeast and southwest arms of Lake Malawi: A geostatistical analysis, Fisheries Bulletin, No. 43, 2001	G.Z.Kanyerere	30	DOF					●
15	Fisheries Research Unit research plan 2000 & 2001, Fisheries Bulletin, No. 44, 2001	M.C.Banda et al.	54	DOF					●
16	Analysis of catch and effort data for the fisheries of Lake Malombe, 1976-1999, Fisheries Bulletin, No. 45, 2001	O.L.F.Weyl et al.	34	DOF					●
17	Analysis of catch and effort data for the fisheries of the South West Arm of Lake Malawi, 1976-1999, Fisheries Bulletin, No. 46, 2001	J.Chisambo et al.	53	DOF					●
18	Analysis of catch and effort data for the fisheries of Domira Bay, Lake Malawi, 1976-1999, Fisheries Bulletin, No. 47, 2001		20	DOF					●
19	Analysis of catch and effort data for the fisheries of Nkhata Bay, Lake Malawi, 1976-1999, Fisheries Bulletin, No. 48, 2001	G.Z.Kanyerere et al.	15	DOF					●
20	Fish Stocks and Fisheries of Malawian Waters, Resource Report 1999	A.E.Bulirani et al.	54	DOF			●		●
21	SADC Inland Fisheries Sector, Policy and Strategy Statement, October 1997		36	SADC	SADC Inland Fisheries Sector		●		
22	SADC Inland Fisheries Sector, Progress Report, April 2001		19	SADC	SADC Inland Fisheries Sector		●		
23	Proposals for a Joint Research Programme, Final Report, March 1986	Warwich UK	80	UK/SADC	Pelagic Fisheries Resources of Lake Malawi/Niassa		●		
24	Monitoring lake Malawi using real-time remote sensing: Final Report, May 1994	M.J.Wooster et al.	-	UK/SADC	Pelagic Fish Resource Assessment Project			●	
25	Management report of the UK/SADC Pelagic Fish Resource Assessment Project, March 1996	A.Menz and A.B.Thompson	59	UK/SADC	Pelagic Fish Resource Assessment Project		●		
26	The Fishery Potential and Productivity of the Pelagic Zone of Lake Malawi/Niassa, 1995	A.Menz (editor)	386	UK/SADC	Pelagic Fish Resource Assessment Project		●		
27	Offshore Fishery Development, A Prefeasibility study to determine the economic and technical viability of exploiting the open water fishery of lake Malawi/Niassa, Final Report, December 1993		89	UK/SADC	Pelagic Fish Resource Assessment Project		●		
28	Pamphlet for the Lake and River Protection Story, June 1999	B.K.Kumchedwa and G.K.Banda	リーフレット				●		
29	Project findings and recommendations, 1995		45	FAO/UNDP	Chambo Fisheries Research Project				

ref.#	収集資料名	著者	頁数	備考 (収集先または ドナー)	プロジェクト名	リソナル	北	抜粋	電子ファイル
	Fisheries management in south-east Lake Malawi, the Upper Shire River and Lake Malombe, 1993, CIFA Technical Paper No.21		113	FAO/UNDP	Chambo Fisheries Research Project				
30	Source book for the inland fishery resources of Africa: Vol. 1, CIFA Technical Paper, No.18, 1990		240	FAO JICA図書館所蔵		●			
31	Proceedings of the Lake Malawi Fisheries Management Symposium, December 2001	J.P.V.Bossche and G.M.Bernacsek edited by O.L.F.Weyl and M.V.Weyl	272	GTZ/NARMAP	Lake Malawi Fisheries Management Symposium				●
32	Lake Malawi Fisheries Management Symposium ABSTRACTS, June 2001		27	GTZ/NARMAP	Ditto		●		●
33	Lake Malawi Fisheries Management Symposium, Workshop reports, June 2001		10	GTZ/NARMAP	Ditto				●
34	The MAFGAD/NARMAP - GTZ Project preformance profile - achievements and lessons		3	GTZ					
35	Lake Malombe artisanal fishery catch assessment 1994-1998. NARMAP Technical Report No. 1, 1999	O.L.F.Weyl	23	NARMAP					●
36	Artisanal Fishery catch assessment for the southeast arm of Lake Malawi 1994-1998. NARMAP Technical Report No. 2, 1999	O.L.F.Weyl	41	NARMAP					●
37	Considerations for the management of the gill net fishery in the southeast arm of Lake Malawi. NARMAP Technical Report No. 3, 2000	O.L.F.Weyl et al.	21	NARMAP					●
38	Traditional fishing gear selectivity in the southeast arm of Lake Malawi. NARMAP Technical Report No. 4, 2000	M.M.Manase	33	NARMAP					●
39	Notes on chilimira net catch composition from catch and effort data in Mangochi District. NARMAP Technical Report No. 5, 2001	O.L.F.Weyl and M.C.Banda	11	NARMAP					●
40	Assessment of the artisanal Fishery catch and effort data collection and analysis procedure in Mangochi District, Malawi. NARMAP Working Paper No. 1, 1999	O.L.F.Weyl et al.	38	NARMAP					●
41	Assessment of routine data collection and flow of information within the Department of Fisheries. NARMAP Working Paper No. 2, 1999	O.L.F.Weyl and M.M.Manase	28	NARMAP					●
42	Mortality rates and catchability coefficients for three major target species in the nkacha net fishery of Lake Malombe. NARMAP Working Paper No. 3, 2001	O.L.F.Weyl	5	NARMAP					●
43	Rapid appraisal of fish marketing in Mangochi District. NARMAP Survey Report No. 1, 2000	O.L.F.Weyl et al.	14	NARMAP					●
44	Rapid appraisal of the small-scale fishery in the Chiweta-Usisya area of Lake Malawi. NARMAP Survey Report No. 2, 2000	O.L.F.Weyl et al.	34	NARMAP					●
45	Rapid appraisal of the profitability structure of catch, processing and distribution of the small-scale fishing sector in Chembe village. NARMAP Survey Report No. 3, 2000	C.Friis	36	NARMAP					●
46	Mangochi District frame survey 2001 ñ register of fishers and beaches. NARMAP Survey Report No. 4, 2001	O.L.F.Weyl et al.	4	NARMAP					●
47	Msaka Village - Summary of preliminary results. NARMAP Socioeconomic Survey Report No. 1, 2001	E.Ganter et al.	-	NARMAP					●
48	Kela Village - Summary of preliminary results. NARMAP Socioeconomic Survey Report No. 2, 2001	E.Ganter et al.	-	NARMAP					●
49	Michesi and Mtumbuka Villages - Summary of preliminary results. NARMAP Socioeconomic Survey Report No. 3, 2001	E.Ganter et al.	-	NARMAP					●
50	Michesi and Mtumbuka Villages ñ Summary of preliminary results. NARMAP Socioeconomic Survey Report No. 4, 2001	E.Ganter et al.	-	NARMAP					●
51	Beach Village Commitees in Lake Malombe. NARMAP Socioeconomic Survey Report No. 5, 2001	E.Ganter et al.	-	NARMAP					●
52	A brief description of two fishing gears from Northern Lake Malawi. NARMAP Short Communication No. 1, 2000	O.L.F.Weyl	4	NARMAP					●
53	Small scale fisheries statistics summary. NARMAP Short Communication No. 2, 2001	O.L.F.Weyl	8	NARMAP					●
54	Fisheries resource user groups in Malawi. NARMAP Short communication No. 3, 2001	M.J.Banda et al.	6	NARMAP					●
55	Artisanal fishery catch assessment manual for Mangochi District. NARMAP Manual, March 2000	O.L.F.Weyl et al.	18	NARMAP					●
56	Traditional Fishery Database: Users Manual. NARMAP Manual, August 2000	A.J.Booth	18	NARMAP					●
57	Guidelines for the formation and training of beach village committees. NARMAP Manual, 2000	M.Hummel et al.	54	NARMAP					●
58	Ncheni Prject, Final Report 2000	G.F.Turner et al.	-	DFID	Ncheni Project				●

ref.#	収集資料名	著者	頁数	備考(収集先またはドナー)	プロジェクト名	リサーチ	コピー	抜粋	電子ファイル
	Lake Malawi Ecosystem Management Project (LaMEMP) : Fisheries Development Component, Project Document, February 2002		48	MBERU, Chancellor College Campus	LaMEMP	●			
60	Annual Report 1998, ICEIDA		20	ICEIDA		●			
61	Annual Report 1999, ICEIDA		22	ICEIDA		●			
62	Annual Report 2000, ICEIDA		24	ICEIDA		●			
63	Newsletter, ICEIDA, No. 6, November 1995		12	ICEIDA		●			
64	Newsletter, ICEIDA, No. 7, September 1996		16	ICEIDA		●			
65	Newsletter, ICEIDA, No. 8, September 1997		16	ICEIDA		●			
66	Newsletter, ICEIDA, No. 10, September 1999		16	ICEIDA		●			
67	Newsletter, ICEIDA, No. 12, October 2001		20	ICEIDA		●			
68	ICEIDA			ICEIDA		●			
69	"Developing Marine Training in the Fisheries Sector: An Evaluation of the ICEIDA-Sponsored Project at the Marine Training College, Monkey Bay, Malawi", December 2001	M.A.Macdonald and L.R.Kamtengeni	59	ICEIDA		●			
70	Application form for the Salima Integrated Small Scale Fisheries Development Project (draft), August 2001		13	DOF			●		
71	The Lake Malawi JICA/GOM Fishing Communities and adjacent rural areas development project	S.A.Mapila	17	DOF			●		
72	The Lake Nyasa Fishery (Tanzania Portion)	M.K.L.Mlay	-					●	
73									
74	The context of small-scale integrated agriculture-aquaculture systems in Africa: A Case Study of Malawi, 1990		389	ICLARM/GTZ			●		
75	Technical Report and Instruction of Aquaculture in Malawi on Rearing Technique Development No1, March 1999	M.Ohashi et al.	37	NAC, Domasi, JICA	マラウイ在来種増養殖研究計画	●			
76	Technical Report and Instruction of Aquaculture in Malawi on Fish Feed Development No1, March 1999	M.Ohashi et al.	63	NAC, Domasi, JICA	マラウイ在来種増養殖研究計画	●			
77	Technical Report and Instruction of Aquaculture in Malawi on Fish Feed Development No2, March 2001	M.Ohashi et al.	34	NAC, Domasi, JICA	マラウイ在来種増養殖研究計画	●			
78	Technical Report and Instruction of Aquaculture in Malawi on Seed Production No1, March 1999	M.Ohashi et al.	22	NAC, Domasi, JICA	マラウイ在来種増養殖研究計画	●			
79	Technical Report and Instruction of Aquaculture in Malawi on Seed Production No2, March 2001	M.Ohashi et al.	18	NAC, Domasi, JICA	マラウイ在来種増養殖研究計画	●			
80	2000/2001 Annual Report	A.O.Maluwa	17	NAC, Domasi, JICA	マラウイ在来種増養殖研究計画	●			
81	事前調査団報告書、1995年6月	林開部、水産技術協力課	84	JICA	マラウイ在来種増養殖研究計画	●			
82	実施協議調査団報告書、1996年3月	林開部、水産技術協力課	60	JICA	マラウイ在来種増養殖研究計画	●			
83	計画打合せ調査団報告書、1996年12月	林開部、水産技術協力課	41	JICA	マラウイ在来種増養殖研究計画	●			
84	終了時評価報告書、1999年3月	林開部、水産技術協力課	88	JICA	マラウイ在来種増養殖研究計画	●	●		
85	運営指導調査団報告書、1999年10月	林開部、水産技術協力課	71	JICA	マラウイ在来種増養殖技術開発計画	●			
86	運営指導調査団報告書、2001年10月	森林・自然環境協力部、水産環境協力課	79	JICA	マラウイ在来種増養殖技術開発計画	●			
87	Aquaculture development and research in sub-Saharan Africa. National reviews, CIFA Technical Paper, No. 23, Supplement, 1994	A.G.Coche	397	FAO JICA図書館所蔵		●			
88	African aquaculture: A regional summary with emphasis on sub-Saharan Africa (p.341-355) in Aquaculture in the Third Millennium, Technical Proceedings of the Conference on Aquaculture in the Third Millennium, 2001 (http://www.fao.org/docrep/003/ab412e/ab412e21.htm)	C.Machena and J.Moehl	471	FAO					●
89	Support aquaculture development in Africa: Aquatic farming systems information network, CIFA Occasional Paper, No. 22, 72pp. (1997) (http://www.fao.org/docrep/x5597e/x5597e00.htm)	A.G. Coche and J. Collins	72	FAO					●
90	Fish farming in Malawi: A case study of the Central and Northern Regions Fish Farming Project, Technical Supplement: On-station Pond Trials, 1997	A.C.Brooks and A.O.Maluwa edited by Dr M.W.Dickson	37						●
91	"Diversification Component of the Special Programme for Food Security - Phase 1", Project No. TCP/MLW/025/MLW/0065(D), 署名: 2001年2月2日	MAI	46	FAO	Special Programme for Food Security - Phase 1	●			
92	"Special Programme for Food Security - Phase 1", Project Document, Project Symbol UTF/MLW/025/MLW	MAI	42	FAO	Special Programme for Food Security - Phase 1		●		
	水域環境生態								

ref.#	収集資料名	著者	頁数	備考 (収集先またはドナー)	プロジェクト名	リジナル	北	抜粋	電子ファイル
93	A Limnological bibliography of Malawi, supplement one. CIFA Occasional Paper, No.13, Supplement 1. 1991	D.Tweddle	18	FAO			●		
94	Lake Malawi Ecology Project, First Annual Report May 1998- April1999, 1999	Department of Biology, Chancellor College	50	JICA	Lake Malawi Ecology Project		●		
95	Lake Malawi Ecology Project, Final Report May 1998-May 2001, 2001	Department of Biology, Chancellor College	42	JICA	Lake Malawi Ecology Project		●		
96	Fish in Lake Malawi and other Lakes in Malawi	S.Mizoiri et al.	12	MBERU, Chancellor College Campus		●			
97	Biological studies on the pelagic ecosystem of lake Malawi, 1982		182	FAO/UNDP	Fishery Expansion Project				
98	Fish Ecology Report, 2000	edited by F.Duponchelle and A.J.Ribbink	255	SADC/GEF	Lake Malawi/Nyasa/Niassa Biodiversity Conservation Project				●
99	Report on Systematics and Taxonomy, 2000 (19 Chapters: 1. Technical report on the systematic and taxonomic component of the SADC/GEF Lake Malawi/Nyasa Biodiversity Conservation Project, 2. Material and methods, 3. Forms used, 4. Localities sampled, 5. Examples of databases, 6. The non-cichlid fishes of the Lake Malawi/Nyasa system, 7. Keys to the tilapiines and the mbuna genera, 8. The genus <i>Alticorpus</i> , 9. The genus <i>Nimbochromis</i> , 10. The genus <i>Ctenopharynx</i> , 11. The deep-water <i>Placidochromis</i> species, 12. Non-mbuna, distribution and species richness, 13. Mbuna distribution and species richness, 14. Progress reports of the students, 15. Preliminary key to the shallow-water (<20m) <i>Lethrinops</i> sensu lato, 16. Preliminary key to the deep-bodied, spotted <i>Copadichromis</i> , 17. Conservation and Lake Malawi/Nyasa: a systematist's non-comprehensive viewpoint, 18. Some views on conservation and Lake Malawi/Nyasa fishes, 19. Recommendations for further monitoring	edited by Dr. J.Snoeks	363	SADC/GEF	Lake Malawi/Nyasa/Niassa Biodiversity Conservation Project				●
100	Water Quality Report, 1999	edited by H.A.Bootsma and R.E.Hecky	271	SADC/GEF	Lake Malawi/Nyasa/Niassa Biodiversity Conservation Project				●
101	Extended abstracts (I. Senga Bay Conference, II. Ncheni Project Workshop), 1999	A.J.Ribbink and A.C.Ribbink	20	SADC/GEF	Lake Malawi/Nyasa Biodiversity Conservation Project		●		
102	Protection of lake Malawi/Nyasa: Lake Malawi/Nyasa Biodiversity Conservation Project, March 1998		リーフレット	SADC/GEF	Lake Malawi/Nyasa Biodiversity Conservation Project	●			
103	The Impact of Species Changes in African Lakes, 1995 (水産分野のみコピー)	Edited by T.J.Pitcher et al.	-				●		
104	A Guide to the Fishes of Lake Malawi National Park (1986)	D. Lewis et al.	-	WWF				●	
105	Lake Malawi/Niassa/Nyasa, Ecoregion-based Conservation Programme, Socio-Economical Reconnaissance, May 2000		55	WWF	Ecoregion-based Conservation Programme		●		
106	Lake Malawi Fish	MALDECO Fisheries limited	4			●			
107	事前調査団報告書、1998. 3	派遣事業部	55	JICA	マラウイ湖生態総合研究		●		
108	終了時評価報告書、2001. 2	アフリカ・中近東・欧州部	29	JICA	マラウイ湖生態総合研究	●			
109	帰国研修員フォローアップ調査 (水産分野II), 1998.3	神奈川国際水産研修センター	22	JICA			●		
110	Natural Resources Management Policies, Laws and Institutions in Malawi, Vol. 1, A Resource Book for District Level Managers (Draft), October 2000	EAD	102	DANIDA		●			
111	Natural Resources Management Policies, Laws and Institutions in Malawi, Vol. 2, A Resource Book for Community Level Managers (Draft), October 2000	EAD	37	DANIDA		●			
112	Strategy for the Decentralisation of Environmental Management (Draft), (prepared with support from DANIDA), November 2001	EAD	40	DANIDA		●			
113	National Environment Focal Point Directory 2001 (Draft), October 2001	EAD	78	DANIDA		●			

ref.#	収集資料名	著者	頁数	備考(収集先またはドナー)	プロジェクト名	初シナ ル	モニ タ	抜粋	電子 ファイル
114	National Environmental Action Plan, Vol. 1: The Action Plan, June 1994	EAD	104	DANIDA		●			
115	National Environmental Action Planning Meeting - Meeting Proceedings, 27th August - 12th September 2001 at the Malawi College of Fisheries, Mangochi (Draft), 2001 (水産分野のみコピー)	EAD	55	DANIDA				●	
116	State of Environment Report for Malawi 1998, July 1998	EAD	113	DANIDA		●			
117	State of Environment Report for Malawi 1998, Recapitulated Version, 1999	EAD	41	DANIDA		●			
118	State of Environment Report for Malawi 2000, Summary Version, 2000	EAD	44	DANIDA		●			
119	District State of Environment Report - Karonga, For the year 2000	EAD	133	DANIDA				●	
120	Karonga District Environmental Action Plan (DEAP) 2001-2006, July 2001	Karonga District Assembly	52	DANIDA				●	
121	State of Environment and Environmental Action Plan for Traditional Authority Mwakaboko, October 2000	EAD	11	DANIDA				●	
122	How to Prepare a State of the Environment Report, Environmental Action Plan and Micro-Project: Instruction Manual for Wildlife and Environmental Club Patrons, September 2001	Wildlife and Environmental Society of Malawi and EAD	45	DANIDA				●	
123	Environmental Impact Assessment (EIA) Certificate Course Training Manual (Draft), June 2001	Chancellor College and EAD		DANIDA				●	
124	Guidelines for Environmental Impact Assessment, December 1997	EAD	63	DANIDA		●			
125	Decentralised Environmental Management Manual, Volume 1, A guide to SOER, DEAP and Micro-Project Preparation, January 2001	EAD	125	DANIDA				●	
126	Environmental Support Programme, Vol. 1, Context and Programme Description, June 1998	EAD	67	DANIDA	Environment Support Programme	●			
127	Environment Support Programme Document : Environment, Peace and Stability Facility Malawi 2000-2004, July 2000	DANIDA	93	DANIDA	Environment Support Programme			●	
128	Capacity Development for Environment / Lake Malawi Lakeshore Environmental Management Programme, Vol. 1, Human Resources Development Plan (Draft), June 2000	EAD	40	DANIDA	Capacity Development in Environment Project	●			
129	Environmental Briefs No.1: Community Based Natural Resources Management (CBNRM) Component, 2000	EAD	リーフ レット	DANIDA	Capacity Development in Environment Project	●			
130	Environmental Briefs No.2: State of the Environment Report, 2000	EAD	リーフ レット	DANIDA	Capacity Development in Environment Project	●			
131	Environmental Briefs No.3: Institutional Framework for Decentralised Environmental Management, January 2001	EAD	リーフ レット	DANIDA	Capacity Development in Environment Project	●			
132	Environmental Briefs No.4: How to Prepare Environmental Action Plans, April 2001	EAD	リーフ レット	DANIDA	Capacity Development in Environment Project	●			
133	Capacity Building of Wildlife and Environmental Clubs: A Partnership between the Environmental Affairs Department and the Wildlife and Environmental Society of Malawi, August 2001	EAD	リーフ レット	DANIDA	Capacity Development in Environment Project	●			
134	Malawi Poverty Reduction Strategy Paper (DRAFT), October 2001		147					●	
135	Agricultural Development Divisions (ADD)	Agricultural Development Divisions	7					●	
136	LAKE MALAWI ECOSYSTEM MANAGEMENT PROJECT, Appraisal Mission, May 20-31.2002, Draft Aide Memoire	LMEMP Appraisal Mission	27	WB/GEF	LAKE MALAWI ECOSYSTEM MANAGEMENT			●	
137	LAKE MALAWI ECOSYSTEM MANAGEMENT PROJECT (LaMEMP), PROJECT CONCEPT DOCUMENT, April 2002	Ministry of Natural Resources and Environmental Affairs	211	WB/GEF	LAKE MALAWI ECOSYSTEM MANAGEMENT PROJECT			●	
137	PROJECT IMPLEMENTATION PLAN (LaMEMP), (i)The Fisheries, (ii) Mobilisation of Social and Institutional Capital, DRAFT, June 2002	Molecular Biology and Ecology Research Unit, Chancellor College Campus	39	WB/GEF	LAKE MALAWI ECOSYSTEM MANAGEMENT PROJECT			●	