

## Preface

There are a numerous number of lakes in the world. As a critical water resource for the local people, the quantity and quality of the water of each lake can either provide great benefits to them or threaten their lives. At the same time, the people themselves affect the quality of the water. The development and conservation upstream also have impacts on the water. Therefore the conservation and sustainable use of the water require comprehensive measures to cope with various factors. Japan's cooperation with developing countries for such measures is important in achieving the objective of sustainable development as provided for in the Basic Law on the Environment as well as the Official Development Assistance Charter.

However, a critical problem which we often encounter when we consider such cooperation is unavailability of basic information about the state of the lakes and their conservation in the subject country. In view of this, the Environment Agency of the Japanese Government requested ILEC to prepare on their behalf reports on the state of the lakes and their conservation in specific developing countries. This is one of such reports and the final of this series because no more budget was ensured to our regret.

This study on Zimbabwe was conducted through (a) interviews with government officials and researchers, (b) a small workshop convened on 24 and 25 February 1999 in Harare, and (c) the water quality check and analysis at Lakes Kariba, Mutirikwe (Mutirikwi) and Chivero respectively representing international large-scale reservoirs, reservoirs in southern, lower semi-arid area suffering from rapid siltation and fluctuation of the water level, and reservoirs adjacent to urban areas. Because the participants in the Workshop submitted excellent papers, we decided to use their papers as they are to form many of the chapters of this report. The conclusions made by Prof. Milan Straskraba at the Workshop were also utilized as the conclusions of this report because his conclusions were well focused and well reflected the discussions made at the Workshop and utilized in this report. The rest were prepared by the ILEC secretariat and Mr. Victor Shiholo Muhandiki of the Jomo Kenyatta University of Agriculture and Technology of Kenya.

The ILEC is very grateful to the officials and researchers who met with the ILEC missions and provided them invaluable information and advice, the participants in the workshop who introduced and discussed specific issues, and the officials of the Department of National Parks and Wildlife Management, University of Zimbabwe and

the Embassy of Japan who provided substantial assistance to the ILEC missions to facilitate their visits to the lakes by arranging boats and other logistical requirements, professional and technical advice and Customs clearance. Special thanks are extended to Dr. Richard Grure who arranged boats and his staff members' technical and other support for the ILEC mission's water quality check at Lakes Kariba, Mutirikwe and Chivero, Prof. C.H.D. Magazda who allowed the ILEC mission members to hire his research institute's boat and arranged their travel, Mr. Elmon J. Dhomo who gave advice to the ILEC missions, made various arrangements for the water quality check at Lake Kariba and accompanied the ILEC mission to the Lake, Ms. Concilia Mangwaya of Kyle Fisheries Research Centre who provided substantial and generous help for the ILEC mission's water quality check at Lake Mutirikwe, an officer of the Department of National Parks and Wildlife Management whose name was not remembered regrettably but who also proved substantial and generous help for the ILEC mission's water quality check at Lake Chivero, Mr. Takao Shibata, Minister-Counsellor, Mr. Sahara, Attaché, Mr. Kazuhiko Maruyama, Counsellor, and Mr. Shunji Chida, Second Secretary of the Embassy of Japan in Harare who provided great help for logistical and substantive arrangements including Customs clearance of the water quality check equipment, Ms. Fumiko Nakai, Project Formulation Advisor, Japan International Cooperation Agency Zimbabwe Office and Mr. Isaya Higa, Environmental Specialist, United Nations Development Programme Zimbabwe Resident Mission, who both kindly gave substantial advice on the environmental conservation, including substantive information and individuals' names active in this area, and Mr. Dominic Mazvimavi, Lecturer, Department of Geography and Environmental Science, University of Zimbabwe, Oliviah L. Zimba, Department of Water Development, Ministry of Rural Resources and Water Development, Dr. N.A.G. Moyo, Lecturer, Department of Biological Sciences, University of Zimbabwe, once again Dr. Richard Gurure, Acting Chief Ecologist (Aquatic), Department of National Parks and Wildlife Management, also once again Dr. C.H.D. Magadza, Director, Lake Kariba Research Station, University of Zimbabwe, Ms. Mufaro Jarawaza, Chief Chemist, City of Harare, and Prof. Milan Straskraba, Biomathematical laboratory, Academy of Sciences of the Czech Republic and Faculty of Biological Sciences, University of South Bohemia, who generously accepted to make presentations in the Workshop and also contributed to the Chapters of this report, and Mr. Victor Shiholo Muhandiki, Teaching Assistant, Department of Civil Engineering, Jomo Kenyatta University of Agriculture and Technology, Kenya, who, despite our sudden request, kindly accepted to go to Zimbabwe for the water quality check and wrote the English report on the results in cooperation with the members of ILEC. All of the contributions of these people and many others made this study and this report possible.

I sincerely hope that this report will not only contribute to Japanese authorities' action but also encourage Zimbabwean people to further effectively conserve and sustainably use the lakes.

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President  
International Lake Environment  
Committee Foundation (ILEC)

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