



NETWAS

NAIROBI RIVER BASIN PROGRAMME PHASE III



RESOURCE BOOKLET ON POLLUTION MONITORING ACTIVITIES

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TABLE OF CONTENTS

FOREWORD	3
PREFACE	4
1. THE NAIROBI RIVER BASIN PROGRAMME (NRBP-PHASE III)	6
1.1 Nairobi River Basin Project – Phases I & II	7
2. POLLUTION MONITORING NETWORK (PMN)	9
3. POLLUTION MONITORING NETWORK FINDINGS	12
3.1 Impacts of Urbanisation on Availability & Quality of Water Resources	13
3.2 Geology and Groundwater Characteristics of the Project Area	20
3.3 Legislative and Regulatory Considerations on the Ngong River Basin	29
4. ACTIVITIES ALONG THE MOTOINE/NGONG RIVER	32
5. NAIROBI DAM	34
6. PARAMETERS ANALYSED AND FINDINGS	36
7. SUMMARY OF FINDINGS ON THE MOTOINE/NGONG RIVER	58
8. RECOMMENDATIONS & WAY FORWARD	60
9. OTHER POLLUTION MONITORING INITIATIVES	65
NRBP-PHASE II POLLUTION MONITORING STAKEHOLDERS	69
NRBP-PHASE I POLLUTION MONITORING STAKEHOLDERS	77
OTHER POLLUTION MONITORING STAKEHOLDERS	79
NGO ACTIVITY IN THE MOTOINE/NGONG PROJECT AREA	81
REFERENCES	83
SOURCES FOR SOME OF THE LISTED PUBLICATIONS	86
PHOTOGRAPH SOURCES	87

FOREWORD

Since the inception of the Nairobi River Basin Project (NRBP) in 1999, pollution monitoring and assessment have constituted key activities within the framework of the project in all its phases. NRBP phase one's main objective was to determine the status and impact of pollution on the Nairobi River and its tributaries. Pollution monitoring and assessment, although limited to a tributary of the Nairobi River system, the Motoine/Ngong River, was a key focus of NRBP Phase II. And in the subsequent phase, the Nairobi River Basin Programme (NRBP), as it is known in its third and current phase, has the development and operationalisation of water quantity and quality measuring protocols as one of its five key result areas.

Availability and access to information on the state of the Nairobi River system has been requisite in determining NRBP's activities and interventions. Pollution monitoring and assessment of the Nairobi River, its tributaries and reservoirs, has therefore been a key cornerstone of the Nairobi River Basin Project/Programme, without which remedial measures to reverse pollution trends would have been impossible. The various studies conducted within and outside of the project's framework have provided indispensable information on the state and sources of pollution, as well as possible recommendations, which have directed NRBP's activities. Although several studies have been carried out, the results have not been adequately disseminated to a wide readership. In addition, these results are contained in various technical reports that might not be easily accessible to readers or even easy to read. This Resource Booklet has been compiled with a non-technical readership in mind, to raise awareness and provide information on the state of Nairobi rivers and their reservoirs.

PREFACE

This Resource Booklet provides information to interested readers on pollution monitoring and assessment activities carried out under the Nairobi River Basin Project. Specifically, it is a collation of various studies and reports related to the Nairobi River Basin Project (NRBP)-Phase II. Its main focus is on water quality monitoring and assessment of the Motoine/Ngong River, a tributary of the Nairobi River, over the last two decades. The booklet is meant to provide a quick and easy-to-read overview of pollution monitoring activities carried out under NRBP phase II. The phase provided scientific information on the status of the river. This information would become the basis of subsequent monitoring of the effects of various interventions on the river regime.

The booklet focuses on the activities of the Pollution Monitoring Network, constituted of five organisations, and the University of Nairobi, the key stakeholders of NRBP Phase II. It puts together results of the various scientific studies on the Motoine/Ngong River in an easy-to-read format, limiting the use of difficult scientific jargon to a minimum. It is meant to provide a quick overview of information and findings contained in technical and sometimes bulky reports, which would otherwise not appeal to a wider readership. It is a booklet primarily targeting stakeholders involved or interested in environmental, water supply and environmental sanitation and integrated water resources management activities within the Nairobi River Basin. It is also for anyone interested in information on the state of the Nairobi rivers.

This booklet is not an exhaustive resource on the extensive river monitoring studies that have been carried out, both under NRBP and other projects. More detailed information is available from listed stakeholders, whose contacts are available in this booklet. It is intended to educate readers, raise awareness on ongoing pollution monitoring activities, on the state of Nairobi River, its tributaries and reservoirs. It also presents proposed recommendations to restore, rehabilitate and manage the river ecosystem. Although it focuses mainly on NRBP Phase II activities, it is an output of the Nairobi River Basin Programme Phase III activities, implemented under one of the key result areas of the phase. The result area focuses on the development of environmental management and planning systems.

The booklet has simply put together the results of the hard work carried out by the Pollution Monitoring Network and the University of Nairobi, Department of Zoology and Centre for International Programmes and Links, under the NRBP Phase II monitoring and assessment component. Special thanks go to Henry Ndede of UNEP for his valuable input on Nairobi River Basin Programme's activities during all its phases, to Professor Kenneth Mavuti of the University of Nairobi, Department of Zoology and Centre for International Programmes and Links for comprehensive data, information and photographs of the sampling stations used during the assessment. Thanks also go to Dr. Kariuki of the University of Nairobi, Department of Chemistry, for his comments and suggestions during the information gathering phase of this booklet. Finally, we are grateful to all the contributors who made this booklet possible, directly and indirectly, through their information and resources: Misheck Kiriimi (NETWAS), Sharon Kahara (NETWAS consultant, 2002), Professor George Krhoda.

This resource booklet is an output of an activity to survey and analyse physico-chemical and biological characteristics of the three main tributaries of the Nairobi River and reservoirs. Implemented under result area one of NRBP Phase III, the activity is coordinated by IUCN, the World Conservation Union, Eastern Africa Regional Office, as a collaborating partner of United Nations Environment Programme (UNEP), the overall coordinator of the Nairobi River Basin Programme.

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