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ACKNOWLEDGEMENTS

The City Council of Nairobi acknowledges the contribution made by the individuals and institutions that have made the publication of this report possible. Special thanks are extended to:

the United Nations Environment Programme (UNEP) and the United Nations Human Settlements Programme (UN Habitat) for their financial and technical support; Kenyatta University for the technical coordination role that it played; and the following individuals in their various capacities:

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Ilt is my sincere hope that the capacity which this process has developed has laid a solid foundation within the City Council of Nairobi to undertake regular assessment of its environmental performance to guide sustainable development planning of the city.

Thank you

John Gakuo

Town Clerk

FOREWORD

Nairobi, like many cities in Africa is experiencing rapid population growth. Combined with the fact that the city is also the economic hub of Kenya and, indeed, of the east and central African region, this means a higher number of inhabitants with lifestyles that demand high energy, more land for the built environment, and increasing consumption of natural resources. In order to mitigate the negative impacts of such growth, there is need for strategic planning which goes in tandem with the pace of development. This can only be achieved through a solid information base to support decision making.

The Government of Kenya believes that a well planned city is the foundation of a strong and adaptable regional economy. In addition to providing employment and shelter, the city is a centre of culture, learning and technological development, a link to the rest of the world, an industrial centre and a place for the generating of income. Proper management of Nairobi city is therefore an important strategy of my ministry in its mission to improve the livelihood of the citizens and maintain reasonable economic growth of the country. Decentralization of local governance has been fundamental in realizing the success that we have recorded thus far.

The transfer of certain responsibilities through subsidiary and decentralization is emerging as an effective way to ensure more timely policy development and implementation. Responsibility for many aspects of environmental and social health and safety lies at the local or municipal level, where action is crucial for poverty reduction, improvement of local environment and provision of early warning on issues of current or potential national and international prominence. For the local authorities like the City Council of Nairobi to perform these responsibilities, timely and up to date information is crucial.

The production of the City of Nairobi Environment Outlook Report is therefore very timely and its successful preparation is clear testimony to the Government's determination to strengthen the planning capacities of all its institutions at various levels. The report will enable us to take stock of the city's environmental performance, to look into the future and assess the various policy options for consideration in the formulation of the City's development strategy.

The process of producing the report largely owes its success to \neg - and merits special commendation for – its participatory nature. It has fostered the participation of different stakeholders in identifying and building consensus on the key issues of environmental concerns in the city, and cultivated a sense of ownership. The report has proposed actions, to which I expect the City Council of Nairobi to give due and timely attention.

It is also my sincere hope that the report will be useful to all who support the sustainable development of the city of Nairobi and maintenance of its position as a regional economic hub and the "African city in the sun".

Hon. Musikari Kombo, EGH, MP

Minister for Local Government

PREFACE



As we strive to enhance our capacity to deal with the emerging challenges of urbanization, it is our strong belief that evidence based planning is the key to sound management of the city of Nairobi. This can only be achieved through the availability of up-to-date and timely information on the social and economic dynamics and the environment of the city.

Preparation of the City of Nairobi Environment Outlook Report is one the strategic initiatives which we have mounted to improve the data and information base available to us as a support tool for decision-making in our day to day operations within the Council.

The protection of the environment is a priority activity of the City Council of Nairobi. In this connection, the Council is implementing a number of projects, all of which aim at controlling pollution, reducing incidences of environment-related diseases, increasing tree cover, landscaping open spaces and planting flowering plants and grass cover. In addition, we are collaborating with other government agencies to enforce laws that protect our forest reserves, the City Park, the Nairobi Arboretum, and the Nairobi National Park, among other equally important recreational and natural reserve areas within the city.

The City Council of Nairobi is fully aware that the success of its beautification programmes, as well as the sanitation programme, depends on information and data on the state of the city's environment. The preparation of the city's environment outlook report is thus a significant contribution to the Council's programmes in this respect. The Council therefore acknowledges with gratitude the support and contribution of the United Nations Environment Programme (UNEP) and the United Nations Human Settlements Programme (UN-Habitat) to the process of producing the City of Nairobi Environment Outlook Report.

The city faces serious challenges of physical and infrastructure planning; unsustainable migration into the city; poverty which is pushing many unemployed people to resort to informal business some of which are detrimental to health; the expanding agricultural activities which often uses unregulated chemicals and waste water, resulting in increased health problems; and encroachment and pollution of riparian reserves and wetlands. The City Council is fully aware of these problems and is dealing with them systematically and strategically.

Extensive consultations with experts through the report process have revealed that the management of the city requires a new thinking and vision. The Council is already responding to these challenges. Stakeholder involvement and public-private partnerships are some of the strategies that the Council has adopted to deal with the problems of services delivery and infrastructure development in the city in the short and medium term. It is, however, our strong convictions that all partnerships in the city must protect the rights of the urban poor to enjoy equitable access to basic urban services such as public parks and other public amenities.

In our endeavour to enhance public participation in the decision-making process in the city, we acknowledge that access to information by all stakeholders is vital as it will better inform decision-making. The City of Nairobi Environment Outlook Report is a very important tool in fostering our partnership with the stakeholders. The Council will therefore move with speed to address the fundamental issues and policy options recommended by this report.

Councillor Dick Wathika
Mayor of the City of Nairobi

CHAPTER 1: BACKGROUND AND INTRODUCTION

1.1 The process

The process of producing the City of Nairobi Environment Outlook Report was a participatory one and is a reflection of the institutional arrangements necessary for the sustainable management of the environment in Nairobi city. It was a joint effort of the Nairobi City Council, UNEP and UN-Habitat, and also involved the collaboration of stakeholders from the public and private sectors, academia and civil society.

Partnership and capacity building

One of the cornerstones of this assessment process was capacity building. The AEO Cities Integrated Environmental Assessment and Reporting Guidelines represent one of a set of training materials and support documents whose main objective is to build capacity in the region for environmental assessment and reporting. In addition, the guidelines aim to ensure that the reporting process conformed to agreed standards. Other guidelines that guided the process included the Methodology for the Preparation of AEO Cities Reports, the Environment Outlook Report Production Manual and the Guide to the DPSIR and Opportunities Frameworks.

Stakeholders' workshop

The stakeholders and partners in this process came together through a series of five thematic workshops. The first was held on 26 October 2005 at the Nairobi offices of the World Conservation Union (IUCN). Subsequent workshops were held at Kenyatta University. These workshops defined the issues for inclusion in the report, assessed progress, reviewed the outline and made comments on the draft document before its submission to UNEP.

Participants at these workshops included: Aquatech Industries, Department of Resources Surveys and Remote Sensing, Enterprise Professional Services Programme, HACO Industries, IUCN, Kenya Wildlife Service, Kenyatta University, Magadi Soda, Ministry of Lands and Housing, Nairobi City Council, Nairobi Water Company, National Environmental Management Authority, NETWAS, Planning Systems Services Limited, Society for Protection of Environment, Sustainable Development Environment Network for Kenya (SENKE), TARDA, UNEP, UN-Habitat, Unilever, University of Nairobi and Water Resources Management Authority.

Institutional framework

A technical steering committee composed of members from both public and private sectors was constituted to provide technical oversight and coordination of the report process.

1.2 Context to the City of Nairobi Environment Outlook Report (CNEOR)

The Africa Environment Outlook process is an initiative of the African Ministerial Conference on the Environment (AMCEN), which started in 2000. It is based on the Global Environment Outlook (GEO) process, which provides a global analysis of environmental issues and trends. The objective of the Africa Environment Outlook is to provide a framework for national and sub-regional environmental reporting in such a way that allows for the monitoring of key environmental and sustainable development targets in Africa. In so doing, the Africa Environment Outlook supports the policy initiatives of the New Partnership for Africa's Development (NEPAD), particularly the implementation of the NEPAD environmental action plan.

One of the upshots of the Africa Environment Outlook process has been a series of complementary initiatives that aim to promote integrated environmental assessment and reporting at different levels. One such programme is the Africa Environment Outlook cities initiative, under which the production of three city outlooks in Africa is being piloted. The three cities are Dakar, Lusaka and Nairobi. UN-Habitat and UNEP are supporting this initiative, which is being undertaken in the context of the Sustainable Cities Programme (SCP). SCP is a global programme aimed at promoting urban environmental planning and management. The overall objective is to support and strengthen local authorities and their partners in the public and private sectors to plan, and manage their city environment in a sustainable manner. This is through provision of technical and managerial knowhow, mobilization and sharing of expertise, experiences and information.

The production of the City of Nairobi Environment Outlook Report is timely and directly in line with the recommendations of the 1994 Kenyan National Environment Action Plan Report, which recognizes that "information is a fundamental resource upon which organizations, countries and individuals depend in managing their affairs. It also feeds into the legal requirement for regular state-of-the-environment reporting as provided for by the Environment Management and Coordination Act of 1999.

With a population approaching 3 million people, Nairobi is rapidly urbanizing. This growth is bound to have a major influence on the urban environment. Already environmental degradation is becoming a major issue facing the policymakers. For Nairobi fully to realize the potential of its natural resources for development, the role of the environment in development and the social, economic and ecological impacts need to be fully understood.

1.3 The analytical framework

The analytical framework for the City of Nairobi Environment Outlook Report is the driver-pressure-state-impact-response (DPSIR) framework that has typically been used in integrated assessment and reporting processes. As described in UNEP 2002, "pressures" are the root causes of environmental change (natural or resulting from human activities). "State" reflects the current situation (and qualitative or quantitative trends over the past 30 years). "Impacts" are the consequences of environmental change on human and ecological systems, and on social and economic development potential. "Responses" include regional agreements and strategies for cooperation, national policies, awareness and education programmes, and community-level projects, aimed at addressing both the causes and impacts of environmental change. In analysing

 How might the various forms of vulnerability in Nairobi be affected by the failures to seize the opportunities and effectively avert the environmental costs so far incurred?

This framework is well suited to demonstrating how the environment contributes to development, where there are policy gaps, and to providing recommendations on how to improve things. It allows positive indicators such as service delivery, increased livelihood options and reduced vulnerability issues to be highlighted. Examples and case studies are used to highlight particular issues of concern and instances of good practice, and to illustrate the links between environmental components and issues. Pressures, states, impacts, and responses are discussed in an integrated manner for each issue.

1.4 Format and content of the report

As indicated earlier, the City of Nairobi Environment Outlook Report presents trends in various aspects of the human-environment system of the city and looks forward to the year 2015. Contemporary issues such as gender and vulnerability issues are noted and these are included in the chapter discussions in an integrated way.

The report's six chapters cover the following areas: Chapter I provides a profile of the city of Nairobi, highlighting its characteristics, topography, natural systems and climate. It also provides an overview of the system of governance and considers how this relates to environment management. Chapter II looks at human demographic characteristics, education and health dynamics.

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