

ZAMBIA

ATLAS OF OUR CHANGING ENVIRONMENT



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FOREWORD



Sustainable development is a critical component of today's international agenda. A number of multilateral agreements and conventions on the sustainable management of the environment have been formulated. These include the Rio Declaration on Environment and Development, Agenda 21, the Johannesburg Declaration on Sustainable Development, the Bali Plan for Technology Support and Capacity Building, and the United Nations Millennium Declaration.

The Government of the Republic of Zambia recognizes that there can be no long term economic and social development if the country's natural resources are not utilized in a sustainable manner. Government's commitment towards environmental management is demonstrated through various plans, programmes, policies and laws such as the National Conservation Strategy (NCS) of 1985, the National Environmental Action Plan (NEAP) of 1994, the Environmental Protection and Pollution Control Act (EPPCA) of 1990, the National Policy on Environment (NPE) of 2007, Vision 2030 and the Environmental Management Act (EMA) of 2011.

The Government further recognizes that in order to implement its plans, programmes and policies, provision of appropriate information to all actors is critical. This is necessary for ensuring sustainable utilization of natural resources and efficient service provision. Without doubt, the effects and magnitude of environmental change so far experienced indicate that the country needs to put in place adequate measures to safeguard its citizens from hazards; ensure secure livelihoods; alleviate poverty; protect public infrastructure; and promote economic growth.

Adverse climatic hazards have affected the country's development programmes by diverting much needed fiscal resources towards mitigation measures. For this reason, there is need to create opportunities to achieve sustainable development through economic growth and diversification, social development and environmental protection. To do this, wide public participation and access to environmental information are essential to the

promotion of sustainable development. Zambia has been producing State of Environment reports to provide information on environmental state and trends, and consequences to decision makers and the general public. The production of the Zambia Atlas of Our Changing Environment provides an opportunity for enhanced graphical and visual depiction of this important information.

The *Zambia Atlas of Our Changing Environment* is therefore, one way of increasing awareness on environmental trends and is a call to all for improved management of our natural resources.


The Atlas aims at providing scientifically-based and credible evidence of the changes occurring across Zambia, as well as their causes, and communicates the urgency of addressing them to policy- and decision-makers and the public. It has been produced through a broad participatory process involving many stakeholders.

This Atlas demonstrates the government's commitment to mainstreaming environment into planning so that economic and social development and the environment are fundamentally interdependent. In other words, the way we manage the economy and political and social institutions has critical impacts on the environment, while environmental quality and sustainability, in turn, are vital for the performance of the economy and social well-being. The government has and will continue to review the legal framework in the environment sector so as to ensure that they are in line and consistent with current macro economic reforms. Environmental issues in Zambia are no longer the responsibility of government alone. The private sector and local communities also play an important role in environment and natural resources management.

The Atlas exhibits that changes in the state of the environment have occurred in different parts of the country. The atlas is a useful resource, which must be used at all levels of development planning in the country.

The preparation of this atlas benefited from technical and financial support provided by many partners. In particular, I would like to recognize the collaboration involving the United Nations Environment Programme (UNEP), GRID-Arendal, GRID-Sioux Falls, the US Geological Survey, the Zambia Environmental Management Agency (ZEMA) and others in producing the Atlas. The Government of Zambia remains committed to such initiatives and other efforts that will contribute to improved management of our environment and natural resources.

Hon. Wylbur Simuusa, M.P



**Minister of Lands, Natural Resources and
Environmental Protection**

August 2013

PREFACE



Zambia has abundant water resources, vast forests, huge mineral deposits, and large tracts of arable land. These natural resources are important for the country's economy, with copper and cobalt being the country's main exports. While mining brings into the country much needed foreign exchange, the extraction of the minerals also results in environmental damage, including land degradation, deforestation, water and air pollution, and solid waste. In addition to mining, other important threats to Zambia's environment are agriculture, urbanization and climate change.

The *Zambia Atlas of Our Changing Environment* aims to visually illustrate environmental changes in the country over recent years, ranging from changes arising from the growing mining sector to changes brought about by agricultural expansion and growing settlements. By visually linking causes with the environmental changes, the atlas is expected to not only provide compelling evidence on the changing environment, but also to call for science-based solutions.

As Zambia aspires to become a prosperous middle-income country through its Vision 2030, it is important that the environment is safeguarded from degradation. Such protection from land degradation will not only ensure sustainable development, but also facilitate green growth and the attainment of socio-economic goals, including those related to health, education, sanitation and poverty reduction. Evidence-based assessments such as the Zambia Atlas of Our Changing Environment are important

only benefit Zambia but also the rest of Africa, given the growing demand for atlases in the region.

The spirit of partnership demonstrated by GRID-Arendal, the Zambia Environmental Management Agency, UNEP, GRID-Sioux Falls and the US Geological Survey in producing this atlas is greatly applauded. Through the partnership it was possible to leverage on each other's capacities, including technical competency, financial resources, political legitimacy, and technology. It is GRID-Arendal's wish that the publication of this atlas is not seen as an end, but as the beginning of an important process of reaching out to policy-makers, the media, academia and other important stakeholders. With an elaborate outreach process, it is possible, as we have experienced with other atlases, to generate some measurable outcomes on policies and programmes that will contribute towards the future we want.

Dr. Peter Prokosch



Managing Director, GRID-Arendal

August 2013

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