**INTRODUCTION**

Like many other developing countries, Kenya’s economy is highly dependent on environment and natural resources (ENR). The majority (65%) of the population of Kenya of about 39 million people live in rural areas and directly depend on ENR for their livelihoods. The sectors of agriculture, and forestry, energy and water, tourism as well as manufacturing are dependent on ENR and together contribute 42% of GDP and account for about 38% of total formal wage employment. Agriculture alone employs 80% of the population and accounts for 18% of formal employment while tourism provides about 9.5% of formal employment. The growth rates of overall GDP between 2002 and 2009 have closely followed the behavior of these main ENR sectors. The ENR sector is the manufacturing base of Kenya’s economy (food and agro-based industries) and is a major provider of environmental services (sequestering carbon, managing watersheds, and reducing deforestation among others).

Although public revenue from this sector is small as percentage of total revenue (7.8%) and as percentage of GDP (about 1.7 %), there is a big potential for increased revenue from these sectors. One of the major challenges facing Kenya now is the increasing environmental degradation which has a huge but un-quantified cost to the economy because of the country’s heavy dependence on natural resources and ecosystem services for the livelihoods of the majority of the people (e.g. wood fuel and charcoal).

**ENVIRONMENT, NATURAL RESOURCES AND VISION 2030**

Vision 2030 states that Kenya is planning to “grow at an average rate of 10% per annum, the growth of which will be dependent on agriculture, tourism, manufacturing and the energy sector which heavily rely on exploitation of natural resources and the environment.” Despite this declaration, there is lack of a clear and researched economic valuation of Kenya’s ENR and its contribution to the economic growth of the country. A clear economic assessment and demonstration of the contribution of ENR to the total value of goods and services to Kenya’s overall economy would be a convincing reason for the sector to get the attention of political leaders, policy-makers, planners and other important decision-makers.

**THE NEED FOR ACTION**

The contribution of environment and renewable natural resources (ENR) is widely appreciated but not routinely measured. Because there is no clear demonstration (in statistical terms) of the value of ENR to the economy, there is a general lack of awareness and understanding of the value of ENR goods and services and its link to other development objectives and processes for the country.

Lack of investment in the ENR sector e.g. improving soil-management and the absence of information on the same makes the sector economically invisible. Non-prioritization of expenditures for ENR is another area that needs attention. Analysis of public expenditure on environmentally sensitive sectors since the 1990s indicates a general declining trend in expenditures. In 1995, the proportion of ENR expenditure to total public development expenditure was 34% but by 2007, this had declined to 17%. Because of under-investing in this sector, both production levels and productivity in the sector are lower when the same variables are compared from other sectors. The tendency in the country is that of overexploitation of the natural resources but with less than adequate investment that would create more sustainable exploitation of ENR critical.
output and value in the sector. A case in point is the non-sustainable exploitation of fish from fresh water lakes such as Lakes Victoria and Turkana and uncontrolled harvesting of forest products, especially for wood fuel.

The stability of the ENR sector in terms of continued provisioning of environmental services as well as the sustainability of this provision has implications to social health and stability of the country. ENR sectors are highly vulnerable to environmental hazards especially in view of the fact that the poor are particularly vulnerable to such hazards. There is need to guard against environmental externalities such as increased incidences of drought resulting from the effects of climate change which often negatively impact on the availability of water and food, among other things.

**GAPS IN CURRENT POLICY OPTIONS**

Although there is intuitive appreciation and understanding of the fact that Kenya is an ENR based economy, policy statements relating to this relationship more often than not lack empirical evidence-based information or data to support such statements and declarations. This therefore leads to failure to highlight the importance of this sector for Kenya’s economic growth and social development to policy-makers, planners and other decision-makers. In the absence of such information, it is not easy to build a case for increased investment in this sector or to convince decision-makers and planners to allocate increased resources towards the development of the sector.

The traditional national accounting practices which are based on market prices are not adequate in capturing the value of non-marketed goods and services from the natural world. Information on returns and contributions of ENR to the national economy are not readily available on existing national systems of accounts.

To ensure a comprehensive assessment of Kenya's wealth, the scope and coverage of accounting needs to consider the non-material income and losses in livelihoods and quality of life resulting from the depletion and degradation of natural capital as found in the environment. There are several approaches to NRA depending on availability of information and policy inclination of the implementing countries.

The policy and legal framework in the environment sector is weak and lacks an overall policy framework that would harmonize and provide direction to the many and often conflicting policies in the sector, e.g. on land, water, mining, wildlife, forestry etc.

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<th>POLICY RECOMMENDATIONS</th>
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<td>In view of the above situation, the following recommendations are in order:</td>
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<td>1. <strong>Build human and institutional capacities in the area of valuation (Environmental Economics):</strong></td>
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<td>• In order to continuously monitor ENR assets in the country, it will be necessary to strengthen human as well as national institutions dealing with the environment and the way accounting is done for it. Relevant training in environmental economics and natural resources management is critical towards improved management in the sector. This calls for improved investment in building the capacities of people and institutions for ENR.</td>
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<td>• <strong>Natural Resource Accounting (NRA):</strong></td>
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<td>Kenya needs to adopt environmental accounting (NRA). The valuation of ENR products and services needs to be expanded to take into account non-marketed products and services. The Kenya National Bureau of Statistics will still need to rely on professionals within the ENR ministries for the valuation of environmental goods and services. The valuation skills needed to undertake NRA should be developed within KNBS and relevant government departments and other institutions.</td>
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<td>• <strong>Indicators of Sustainable Development:</strong></td>
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<td>The first step towards this goal is to develop a set of relevant environment and natural resource indicators that are linked to all sectors of the economy. Linkages with other government and research institutions also need to be strengthened. At the same time, the government should invest in the requisite infrastructure for the collection</td>
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of specialized data for formulating indicators. The data should be packaged appropriately and made accessible to all stakeholders.

4. Sensitization of local level stakeholders, especially local authorities, and their involvement in mainstreaming activities and processes is critical for sustainable management of ENR.

**Economic Instruments** - These include tax incentives and disincentives and should be developed and put in place in order to assess value of environmental goods and services.

5. Promote public-private partnerships at sub-national levels, especially where private investments have demonstrated profit streams from environmental services and goods.

2. Ensure policy and legal frameworks are updated, and harmonized by joint reviews by all the relevant ministries, departments and other stakeholders.

6. Existing environmental priorities in sector policies and plans are not adequately enforced as such there is need for a framework for the implementation and enforcement of rules and regulations that govern the environment in all sectors.

• Management of ENR sector is spread across many ministries and departments of government and is governed by diverse legislations and policies that are not harmonized.

7. Environmental education should be integrated in curricula at all levels of learning and should be made a requirement for participation in parliament.

3. Review and update the national system of accounts on collecting, storing and monitoring data on the environment. Formally adopt the international accounting standards including green accounting.

• Investment in training, R&D in the area of environment should be strengthened.

### About PEI:

PEI is a global UN-led programme to support country level efforts to mainstream poverty-environment linkages into national planning and implementation processes. PEI does this by providing technical and financial assistance as well as delivering capacity development programmes to governments and other stakeholders at the country level. The ultimate objective is to integrate the valuable contribution of good environmental management to improved livelihoods, increased economic security and income opportunities for the poor. PEI Kenya started in 2005 and has since worked with the Government of Kenya to improve the understanding of stakeholders of P-E linkages, has conducted a preliminary economic assessment of the contribution of environment and natural resources to Kenya's economic growth, has build the capacity of the government in delivering pro-poor environment policy and has strengthened the participation of key environment stakeholders in policy-making and planning processes through relevant trainings. PEI has also facilitated the development of tools for integration of environment into development plans and budget processes.

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