Towards Developing an Education for Sustainable Development Strategy for Kenya: Experiences and Perspectives

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Abstract

An assessment of the progress made by Kenya in implementing the Agenda 21 objectives and principles of Education for Sustainable Development (ESD) revealed that Environmental Education (EE) in Kenya has not adequately addressed threats to the environment—as demonstrated by the State of Environment Report for 2003.This has been partly due to the lack of a comprehensive strategy. EE in Kenya has not focused much on inter-linkages between the environment and Sustainable Development (SD). Besides, the environment has been looked at in great detail from the biophysical view but with less emphasis on economic and social perspectives. There has been little emphasis on social critical, reflexive and participatory approaches to EE.

Global ESD therefore, provides Kenya an opportunity and a framework within which an array of local innovations can be developed based on varied needs and priorities, as reflected in the millennium development goals and the NEPAD(New Partnership for Africa's Development) plan of action. Kenya's position is to domesticate and contextualise ESD towards an educational policy reform and practice. The strategy has drawn upon existing educational initiatives in the Kenyan education system such as the Eco-schools environmental action learning approaches.

The scope, framework, principles, objectives and goals of our ESD strategy are aimed at building the capacity of Kenyans to achieve SD as well as a better quality of life. Programme areas for ESD have been identified and guidelines for implementation provided, to ensure financial, economic, social and environmental sustainability and provide opportunities for learning and growing. Finally, recommendations to support the implementation of the ESD Action Plan in Kenya have been made.

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Introduction

Kenya's wealth is endowed in its natural resources that are distributed throughout the nation. It is among the 47 countries within sub-Saharan Africa that depend heavily on their natural resources for economic and social needs. Two-thirds of the country's population live in rural areas and rely on agriculture and other natural resources. However, the natural resource base is shrinking rapidly, environmental problems are becoming increasingly severe, pushing the country into poverty and associated environmental problems such as deforestation, soil erosion, pollution and health. This indicates that these resources cannot be guaranteed for future generations in the same quantities and quality. It is unsustainable. Despite the various initiative and responses that have been practiced and recommended, there have not been any remarkable results.

As a response to the above challenges, Environmental Education (EE) is one of the efforts the Kenyan government adopted following the 1977 Tbilisi Conference, and the 1987 Moscow Conference. The Kenyan government is committed to Agenda 21, Chapter 36 on Education and Sustainable Development, and demonstrated by this by the adoption of the National Environment Action Plan (NEAP). Poverty is still a major challenge facing the country. It is estimated that 75 per cent of the nation's population is living below the poverty line. The poor socio-economic status of the people has far-reaching consequences for the country's efforts to conserve its natural resource base.

EE in its traditional forms is limited in meeting the immense challenges posed by unsustainable patterns of development and unsustainable life-styles. New educational approaches are required to motivate people to act upon awareness to achieve the necessary changes of life-styles. These should further provide the basis for mobilizing support for public and private initiatives in developing a new ecological vision and fostering a sense of global solidarity.

Faced with the above challenges, there is an urgent need to reorient current teaching about the environment with ESD. The Kenyan population needs to be sensitized on the importance of using available natural resources sustainably to cater to present and future generations. ESD requires policies, legislation and regulations to be enforced to ensure economic production processes based on respect for natural and cultural capital resources. High quality information is essential for promoting ESD.

Formal and non-formal ESD along with civic education is fundamental in developing respect for nature and an understanding of cultural values. To coordinate this and ensure effective implementation, a national framework (strategy) is important to affirm that Kenya places ESD at the center of the national agenda, prepares action plans and allocates adequate resources for the programmes.

In a further pursuit to attain the goals of SD, the nation identifies *capacity building* as a viable response within the interplay of political, economic, social and technological hurdles. ESD for all levels is a strategic approach to meeting this requirement. This, therefore, has called for a shift from EE to ESD indicating a change of focus from concern primarily for nature and the non-human environment, to an approach emphasizing the interdependence of human welfare and a healthy environment. SD will therefore be the main goal of the whole education system, both formal and non-formal, from preschool to higher education and adult education.

Kenya seizes the opportunity to use the UNESCO-UNEP Decade of Education for Sustainable (DESD), 2005-2014 to set the pace towards improved delivery of ESD. The National Environmental Management Authority (NEMA) has recognised the need to develop a national framework: *ESD: Strategy for Kenya 2005-2010,* to mainstream ESD in Kenya's education system. The strategy focuses on key domains of ESD namely Basic Education, Reorienting Existing Education Programs, developing Public Awareness and understanding of Sustainability and Training in achieving SD. The strategy also focuses on pertinent issues that need to be addressed in order to achieve SD in Kenya. These include overcoming poverty, achieving gender equality, health promotion, environmental conservation and protection, rural transformation, sustainable production and consumption, intercultural understanding, peace and disaster preparedness.

The strategy aims at achieving the following specific objectives:
- Raising the level of environmental awareness and building capacity to enable all Kenyans to engage in the achievement of the goals of SD.
- Promoting the co-ordination of ESD activities.
- Recognizing the special relationships that local communities have with the environment and ensuring that their perspectives are represented in ESD initiatives.
- Enhancing and supporting the integration of ESD into all learning programmes, projects and initiatives.
- Developing partnerships between stakeholders, including the private sector, to promote and increase the level and quality of ESD.
- Promoting technical cooperation, networking and information sharing.
- Providing Kenyans with a framework within which to develop effective ESD programmes.

Whereas the Environmental Management and Coordination Act (EMCA), 1999 establishes a link between environmental protection and the right to a healthy and clean environment for all, education apparently is the primary agent of transformation towards SD. NEMA focuses on increasing people's capacities to transform their visions for society into reality. Education not only provides

scientific and technical skills, it also provides the motivation, justification, and social support for pursuing and applying them.

The strategy has drawn upon existing educational initiatives in the Kenyan system. The mainstreaming of environmental issues in the curriculum at primary and secondary schools in Kenya dates back to the colonial days (before 1963). The Kenyan government has, since the publication of the Report of the National Committee on Education Objectives and Policies (NCEOP) in 1977, made deliberate attempts to mainstream environmental issues in all curricula at all levels. The commitment was reiterated when parliament adopted Sessional Paper No. 6 of 1988 on Education and Manpower Training for the Next Decade and Beyond with a call to make environmental studies part and parcel of every training and to be integrated at all levels of education.

At early childhood education level, EE is integrated in the curriculum using a thematic approach. At the primary and secondary school level, environmental issues are mainstreamed in the existing subjects using a multidisciplinary approach.

All teacher-training colleges currently offer courses in EE. The same case applies to university level education where faculties/departments of Environmental Studies exist. Some universities use an interdisciplinary approach.

Nevertheless, both the formal and non-formal sectors in Kenya have clearly lacked a strategy to guide the implementation of EE. These sectors are critical in achieving goals of SD. The Government, Non-Governmental Organizations, Community Based Organizations, the private sector and individual initiatives can collectively achieve the goals of SD in conjunction with NEMA as the coordinating body.

The KOEE-DOC EAL/Eco-schools Nyanza initiative as a means of environmental conservation and poverty reduction has provided lessons and a framework for ESD aimed at providing long-term environmentally sound decisions that lead to appropriate joint activities for the environment.

Lake Victoria Basin-Nyanza which was selected as the immediate project area is poverty-stricken: Lack of food; people who are unable to learn or work to their potential capacity; small land sizes—ranging from 0.08 hectares to 0.25 hectares per person; people who are very vulnerable to diseases, including HIV/AIDS; high level of unemployment; low status of farms—no access to business credit/loans; lack of enterprise sustainability—project and investment initiatives; and prevalent death rates for the area of 20 per cent. Furthermore the lake and its resources are seriously impacted by human activities. Increasing population pressure and socio-economic activities in the basin have resulted in changes in land use patterns and intensity, which has caused changes in water quality, biodiversity, wetlands and fisheries.

The interdisciplinary approaches in EAL provide an open-ended learning and problem solving process to all sectors and learner groups:

- Putting local environment, action and learning at the centre of education, to enhance sustainable lifestyles.
- Taking action for the environment as an essential part of learning, while solving environmental problems.
- Utilising micro-projects as learning aids and as linkages for dynamic community partnerships and networks.
- Enhancing democracy and participation opportunities for communities to experience environmental citizenship.

EAL refers to various modes of environmental participation developed by EFs and the active learning styles employed in the study of environmental and development problems:

- Action that is designed to solve environmental problems involves negotiation, persuasion, consumer action, legal action, political action and eco-management through active learning strategies.
- Students' active role in their own learning and in their communities enhances experiential opportunities in the natural environment and in the community and develops skills and characteristics of quality work and citizenship.
- Solving environmental problems and providing basic knowledge and skills for optimizing the learning environment is key to mobilizing resources and meeting the needs of the learners.

The eco-school strategy applies five key components of environmental action learning namely:

Development of School environmental policy within the schools development plan. In addition, an Eco-code is developed to demonstrate the commitment of the schools and the communities surrounding them to environmentally friendly actions in conserving biodiversity in the long run.

- *An Environmental Audit*: This study acts as a starting point for the school and community to enable them to set practical and realizable object goals towards solving school-community environment development problems.
- *Establishment of a plan of action***:** The committee in consultation with other stakeholders, formulates the projects as well as implementation and management strategies.

Development of local curriculum teaching and learning resources within the context of school syllabi aimed at enhancing students' knowledge and understanding of their local environmental problems.

School-community cooperation aimed at promoting collaborative efforts in solving common problems through local environmental projects. This will also build the capacity of communities to implement Agenda 21.

Development of school networks and exchange programmes to promote the dissemination and exchange of information through visits, the local press, newsletters television, radio and the Internet.

EAL operates within the context of ESD Premises based on four interdependent systems:
- ●Biophysical systems provide the life support systems for all life, human and non-human.
- ●Economic systems provide a continuing means of livelihood (jobs and money) for people.
- ●Social systems provide ways for people to live together peacefully, equitably and with respect for human rights and dignity.
- ●Political systems through which power is exercised fairly and democratically to make decisions about the way social and economic systems use the biophysical environment.

It also operates within the holistic view of ESD inter-related principles for sustainable living:
- Conservation to ensure that natural systems can continue to provide life support systems for all living things, including resources that sustain the economic system.
- Peace and equity to encourage people to live cooperatively and in harmony with each other and have their basic needs satisfied in a fair and equitable way.
- Appropriate development to ensure that people can support themselves in a long term way. Inappropriate development ignores the links between the economy and the other systems in the environment.
- Democracy to ensure that people have a fair and equal say in how natural, social and economic systems should be managed

Benefits of EAL include: responding to environmental opportunities and challenges; active participation in solving environmental problems; integrating local knowledge into environmental management systems; developing positive attitudes and commitment to the environment; savings in consumption and poverty reduction and setting examples of the best practices in the sustainable management of natural resources. Furthermore, outputs of the programme include: training and capacity development; media communication/public awareness; information, networking and partnerships; materials development; demonstration and best practices; awards schemes as well as policy development for EAL.

It is expected that:
The Eco-school programme will become an integral part of the national curriculum and be incorporated in NEMA's ESD strategy; that the Kenyan Institute of Education (KIE) will adopt the training programmes and material derived from the project.

Anticipated outputs include:

Action oriented education material based on micro-projects produced:

●Teachers in primary and secondary schools skilled in environmental action based learning.

●Income generating school micro demonstration projects on health and environmental themes established in collaboration with local communities. Selected themes: Agriculture, Agro-forestry, Water Management, Waste Management and Energy. Health, Entrepreneurship and Disaster Preparedness treated as cross-cutting themes.

●Local communities around demonstration schools involved in improving the school environment through active participation in the micro projects.

●Curricula teaching in relevant subjects localised to address local conditions and enhance student motivation.

●Increased awareness about the concept of environmental action based learning within the educational system and the general public.

Kenya's Strategy for ESD will provide the general framework needed for the development of a comprehensive National Environmental Education for Sustainable Development Programme. The ESD strategy will offer a mechanism to enhance the coordination and supervision of all initiatives pertaining to its programmes. It will further ensure that there is information sharing, networking and partnerships amongst all stakeholders.

The identified programme areas are based on the challenges facing the achievement of ESD in the learning systems. These include:
- Capacity Building
- Support Material Development
- Market ESD Programmes
- ESD Curriculum Development
- Monitoring and Evaluation
- Networking and Partnership
- ESD Policy Development
- Fundraising
- Incentive Schemes
- ESD Research
- Participatory Action/Best Practices/Demonstrations
- Coordination

The process of mainstreaming ESD at policy, institutional and learner levels will take comprehensive reference actions for each sector separately. This will take into consideration key factors such as the creation of legitimacy/authority, teacher training and other kinds of competence building, organization and support structures in schools, financial resources and networks of co-operation. The action plans have the following components: programme areas, activities, implementing institutions and a timeframe.

Conclusion

The sustainability and effective implementation of the ESD strategy

This strategy is the product of a participatory process by NEMA and multiple lead agencies and stakeholders in the EE sectors through a series of workshops and discussion groups held in the years 2003 and 2004. Notable key stakeholders who contributed to it include the Kenya Organization for Environmental Education, Kenya Institute of Education, Kenyatta University, Wildlife Clubs of Kenya and Nature Kenya.

NEMA looks forward to the document being adopted by all concerned stakeholders. The commencement year for implementation is 2005 and the review period should be after five years (2010).