Nile Transboundary Environmmetal Action Project

Networking Environmental Education and Awareness Practitioners in Uganda



WORKSHOP PROCEEDINGS

Formation of **National Environmnmetal Education** and Awareness Working Group

> Sunset Hotel, Jinja, Uganda 7-8 October 2004

Robert Nabanyumia (NPC Ugan and Ameda Ida-Marie (Rapporteur)

Compiled by Robert Nabanyumia (NPC Uganda) **Edited by** Maushe Kidundo EE&A. Lead Specialist

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INTRODUCTION

Environmental education and awareness is not new. Environmental education (EE) was passed informal from generation to generation since time in memorial. Children were brought up by their parents to know what plants and animals could be eaten and how to collect them. That is environmental education – getting to know your environment. Environmental education and awareness become an issue in the international arena in 1972 after the UN conference on Human Development in Stolkhom, the formation of UNEP in 1972 and the subsequent establishment of the international EE programme in 1975. EE was then formalised. A series of international conferences like the intergovernmental conference on EE in Tbilisi in 1977 and Tbilisi +10 in Moscow have continued to shape the planning and implementation of EE activities.

The link between a strong environmental education component and the success of any environmental project can not be over debated. The Nile transboundary Environmental action project – one of the seven projects under the Nile basin shared vision has an environmental education and awareness component. The aim of the component is to stimulate positive behavioural change towards good environmental practices among the communities along the basin.

The Nile – the worlds longest river flowing 6,600 km and drains 3.1 m km2 – is home to about 160m people. The overwhelming majority of people of the Nile basin live in rural areas and depend directly on land and water resources for shelter, income and energy. This has put enormous pressure on the natural resources and ecological systems on which the economic development is based. This has resulted in a variety of environmental problems – soil erosion, degradation of agricultural lands, desertification, loss of forests and wetlands, overgrazing of pastures, declining water quality, overexploitation of fisheries, eutrophication of lakes, invasive water weeds, inadequate urban waste management, water borne diseases, declining biodiversity, and the threat to climate change.

Coupled by the threats and the fact that the linkages between environmental conditions and human welfare are extraordinarily complex and the appreciation and understanding how human behaviour can contribute to the solving environmental problems remains generally low in the basin, sets a big challenge for deepening public awareness and the understanding of the linkages.

In order to contribute significantly on this challenge, the EE&A component embarked on setting up partnership and networks with practitioners and other stakeholders within the basin. Based on the background that there are many players undertaking various EE&A activities, there is lack of a forum for exchange of ideas and collectively plan and monitor EE&A activities.

Understanding the importance and potential for such a forum, the EE&A component within the Nile Transboundary Environmental Action Project (NTEAP) supported and facilitated the formation of a National Environmental Education and Awareness Working group through a two-day workshop. In addition workshop participants developed National EE&A priority activities and learned on the status of EE&A within the country from paper presented.

This report summaries the proceedings of the workshop. The document is divided into five sections. Section one hinges on the objectives and expected outputs of the workshop. A summary of the papers presented comprises section two, while section three list priority EE&A activities. Section four presents the closing ceremony. Section five forms the appendices.

As the world enters a decade for Education and Sustainable Development (2005 – 2015), it is my hope that this document will act as a baseline for EE&A as we evaluate ourselves at the end of the decade.

Maushe Kidundo Environmental Education and Awareness Specialist November 2004

THE WORKSHOP PROGRAM

Thursday 7th October 2004

Session 1 Official Opening

Time	Activity	Facilitators
08h30	Registration	Ms. Ameda Ida
09h00	Prayer and Anthem Welcome and brief on NBI	Mr. Robert Nabanyumya, NPC
09h15	Opening Remarks	Guest of Honour: Dr. Aryamanya-Mugisha Henry, (ED) NEMA
09h45	The Nile Basin Initiative	Mr. Tom Waako, NBI Secretariat
10h15	EE&A within NTEAP and Workshop Objectives	Mr. Maushe Kidundo, EE&A Lead Specialist

10h: 45 Tea

Session 2 Country papers on Environmental Education and Awareness

Time	Activity	Facilitators
11h15	The Status of EE&A in the Uganda	Ms. Beatrice Adimola, (EEC) NEMA
11h45	EE in schools	Mrs Immaculate Kijjagulwe
12h15	EE curriculum in universities	Dr. Daniel Babikwa, (IACE) MUK
13h00	Discussion on the three papers	NPC/Facilitator

13h.30 Lunch

Time	Activity	Facilitators
14h30	Video show: Nile Basin initiative	NPC
15h00	Public awareness and campaigns	Ms. Betty Gowa, NEMA
15h30	Case study of EE in Buliigo P.S. & the community	Ms. Akwi-Okwi
16h00	The role of the media in awareness creation	Mr. Wamboga Mugirya
16h45	Discussion on the three papers	NPC/Facilitator

17h: 00 TEA

Friday 8th October 2004

Session 3 EE and A activities opportunities: National and Transboundary

Time	Activity	Facilitators
08h30	Recap	NPC
08h50	Group 1: Development, production and use of EE material Group 2: Implementation strategies at national and Transboundary areas Group3: Networking (information exchange and media) working	Mrs. I. Kijjagulwe Ms. B. Adimola
	groups	Ms. B. Gowa
09h50	Discussions and clarifications	Robert Nabanyumya & Mr. Maushe Kidundo

11h: 00 TEA

Time Activity		Facilitators
12h30	Group presentations and discussions	EE & A lead specialist

13h: 00 Lunch

Session 4 Way forward and Conclusion

Time	Activity	Facilitators
14h00	Workshop (country) recommendations	NPC
15h00	Networking-Working group (,membership, sustainability, etc)	Participant
15h30	Indicative National EE & A FYO5 workplan	NPC
16h00	Closing remarks	Ms. Proscovia Mulyowa NCDC

16h: 30 Tea

Departure

Acronyms

CBOs Community Based Organisations
DEOs District Environment Officers
EE Environmental Education

EE & A Environmental Education and Awareness

EJAU Environmental Journalists Association of Uganda

HODs Heads of Departments **NBI** Nile Basin Initiative

NEMA National Environment Management Authority NCDC National Curriculum Development Centre

NGOs Non Governmental Organisations

NTEAP Nile Transboundary Environmental Action Programme

NPC National Project Coordinator SVP Shared Vision Programme TORs Terms of References

UMA Uganda Manufacturers' Association

TV Television

KAP

OPENNING SESSION

A word from UNDP Uganda



Ms Alexandra Karekaho, Assistant Resident Representative, UNDP Uganda assured participants of her personal and that of her organisation support in the implementation of NTAEP activities. "I am very happy to be part of this congregation today and I assure you that we at UNDP will support the implementation of NTEAP activities". I now call upon Dr. Arymanya Henry-Mugisha,

Executive Director, NEMA and also the NTEAP Project Steering committee Member to officially open the workshop."

Official Opening

Dr. Arymanya Henry-Mugisha, Executive Director, NEMA NTEAP Project Steering committee Member

Representatives of Development Partners, Invited Guests, Ladies and Gentlemen:

On behalf of the National Environment Management Authority and on my own behalf, I would like to take this opportunity to most warmly welcome you to the first workshop of the Nile Transboundary Environment Action Project.

As a member of the Project Steering Committee, I take pride in seeing that what we have been planning for quite sometime now is finally getting actualised and implemented. I recall that while we were approving the Annual Work plan for this project, we reiterated that we want practical, on the ground activities at country level. I am therefore happy to see that this is starting to happen.



Sound and productive environmental resources as you all know today is one of the pillars of sustainable socio-economic development the world over. Indeed the environmental factors determine our health and wealth. This is demonstrated by the facts that in Uganda, over 90% of the people derive their livelihood directly from environmental resources. Over 80% of the population depends on agriculture, which is rain fed and based on natural resources. Over 95% of the energy is wood-biomass-based. A majority of rural communities depend on natural sources of water supply such as rivers, lakes, swamps, springs and wells.

These statistics to mention but a few, therefore underscore the importance of environment and natural resources in the livelihoods of the people of Uganda. It points to the fact that environmental concerns such as deforestation, water pollution, waste management, biodiversity

loss, wetland degradation, and land degradation among others must, as a matter of priority be addressed in Uganda's effort to modernize agriculture and eradicate poverty.

The prevalence of these concerns in Uganda today point to the need for immediate, large scale and effective remedial action across disciplines and development sectors.

One of the effective measures and indeed cornerstones in sustainably addressing concerns of environmental degradation in the country is environment Education and Awareness. Public information and education is the foundation of any actions to address environmental problems as information is critical in empowering individuals to participate effectively in the process of social change.

Please note that as you discuss environment awareness issues in the country, you are not starting from scratch.

I am glad to inform you participants, that NEMA has made some progress in building a basis for environment education and Awareness.

NEMA has developed, through participatory processes, three public education and information strategies. These are strategies on:

- (i) National Formal Environment Education;
- (ii) National Non-formal Environment Education and Community Training; and
- (iii) Public Awareness.

The implementation of the National formal Environment Education Strategy is in advanced stages. I am happy to announce that environment education has now been integrated in the pre-primary and primary school curricula. We are now beginning to see tangible school environment education programmes including proper waste management, improved sanitation, energy conservation and general improvement of school cleanliness. The next level; the secondary school curriculum, is now being reviewed to incorporate environment education as part of the teaching process. Incorporation of Environment Education in tertiary institutions, particularly in the Universities has also commenced focusing on both first degrees and also post graduate degrees for both government and private students.

With respect to the Non-formal Education Strategy, a comprehensive training source book has been produced and training initiated in selected districts.

In the area of Public awareness, Television and Radio programmes have been implemented.

Distinguished participants, Ladies and Gentlemen

In spite of these efforts and efforts of other partners, a lot remains to be done. This workshop therefore comes at an opportune moment to enable us achieve greater heights.

It is my sincere conviction therefore, that this workshop will help us make two achievements among others:

- (i) It should help us develop coordination mechanisms and enhance synergy in the development and delivery of Environment Education and awareness programmes in the country as well as in the entire Nile Basin, and
- (ii) Build upon the initiatives of NEMA and other partners here present, based on the lessons learnt to ensure that widespread and effective environment education programmes are developed and implemented.

In your deliberations therefore, I wish to call upon you to pay particular attention to the following aspects:

ONE:

Environment Education as a concept should be accompanied with action. It is therefore time to move away from environment education that talks of environmental attributes, environmental degradation, to environment education that yields tangible action on the ground. We need to enlighten and commitment translated into proper environmental management.

TWO: One could say that environment degradation is a result of use by different resource users. There are those people who degrade the environment innocently due to lack of understanding. Secondly, there are those who degrade the environment due to lack of alternatives. And lastly, those who degrade the environment deliberately.

In addition to address these problems, there are implementers, planners and decision makers.

In order to address environmental degradation problems, therefore a diversity of education methods are called for. But more importantly, Environment Education and Awareness programmes must have specific target groups. As part of the targeting process, you should consider involving the various target groups in the planning and design of Environment Education and Awareness Programmes. This workshop is part of that process.

THREE:

In your deliberations, I would like to request that you further review the roles of each of us, with regard to Environment education and identify comparative advantages for each of us. This will enable us become effective and avoid waste of resources through duplication of effort and misguided information and education programmes. This requires you to also identify reliable and effective collaboration mechanisms.

FOUR:

Related to three above, you should consider and critically review the capacity of partners, especially those directly involved in implementing information and education programmes. In particular I wish to point out the media houses, the District Information Officers and Environment Officers who are key in public education but whose capacities may not be adequate. These capacity building is critical particularly later after implementation of this project. We need to focus on sustainability.

It is my conviction that if this workshop critically looked at the issues above, among others, we shall have effective and sustainable Environment education and Awareness programmes.

On behalf of NEMA and on my own behalf, I wish to express gratitude to the GEF, World Bank and UNDP for funding this workshop. I Wish also to thank the Nile Basin Initiative for coordinating the development and implementation of the NTEAP project. There is no doubt that environment education will continue to be an important element to ensure effective environment management. The country now needs to enhance cross-district and cross-national border collaboration in awareness.

I want to thank all of you participants for accepting to come and deliberate on this important subject.

In conclusion, I wish to assure you all that NEMA will promote and ensure implementation of your proposals that are well articulated and action oriented programmes.

It is now my pleasant duty to declare this workshop on Public Information and Education, officially open.

I wish you fruitful deliberations and I thank you all.

FOR GOD AND MY COUNTRY

The Nile basin Initiative

A Strategic Action Plan for the Sustainable Development of the Nile Basin for the benefit of all

Tom Waako NBI Secretariat P.O. Box 192, Entebbe twaako@nilebasin.org

The Nile Basin countries include: Burundi, D.R. Congo, Egypt, Eritrea, Ethiopia, Kenya, Rwanda, Sudan, Tanzania and Uganda

Basin Challenges

- * Rapid population growth rate
- Low socio-economic development
- Environmental degradation
- Poverty
- Water stress
- Fragmented approach
- Public awareness and participation issues
- Opportunities
- Food productivity
- Energy Political
- ❖ Environmental conservation

 Pispute→Cooperation

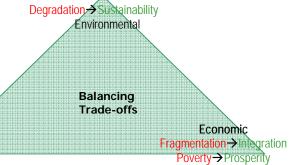
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 Cooperation

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 Cooperatio
- Integration of economies



The Shared Vision

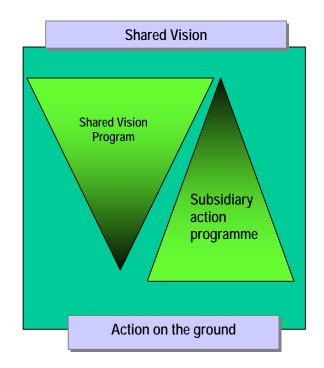


"To achieve sustainable socio-economic development through equitable utilization of, and benefit from, the common Nile Basin water resources."





The Strategic Action Plan



1. Nile Transboundary Environmental Action



Basin-wide water quality monitoring

The Need

Transboundary assets & threats Relationship environment & development Sustainable development opportunities Stakeholders forum

Major Components

- Community-level land and water conservation
- Environmental education and awareness
- Wetlands and biodiversity conservation

2. Nile Basin Regional Power Trade The Need

Adequate power critical for development Less than 10% access to electricity Untapped hydro and energy resources Power trade opportunities

Least cost & environmentally sustainable development

Major Components

- Establishment of Nile Basin Power Forum
- -Facilitate dialogue and cooperation
- -Commission special studies (instit, regulatory, technical)
- -Assist in developing strategic frameworks and agreements for advancing power trade
- -Prepare a consistent framework for forecasting power demand
- -Facilitate training programs
 - Basin-Wide Analysis
- -Demand, supply & trade opportunities
- -Multi-purpose river basin management
- -Input into SAPs



3. Water Resources Planning & Management

The Need

Strong foundation for regional planning & management Sound water policies

IWRM best practices

Common basis for communication, information exchange & WRM analysis

Objective

Enhance analytical capacity for basin-wide perspective to support development, management, and protection of Nile Basin water resources.

Water Resources

Major Components

Water Policy Good Practice Guides & Support

Component coordination and implementation

Basic guidelines for policy formulation and implementation

Policy fund support facility for water policy formulation and implementation

Project Planning & Management

Component coordination and implementation

Good practice guidelines and skills development in project preparation, planning and design Good practice guidelines and skills development in project management and administration support

Technical guidelines for joint projects developed, reviewed, and disseminated, upon country request

Project planning and management fund support facility

4. Confidence Building & Stakeholder Involvement

The Need



Cuts across all SVP projects Public awareness & stakeholder involvement Understanding & confidence Ownership

Objective

To develop confidence in regional cooperation under the NBI, at basin-wide and local levels, and to ensure full stakeholder involvement in the NBI.

Major Components

Public information (getting message out)
 Public relations & outreach
 Material production

Advisory & training services

Stakeholder Involvement (strengthening partnerships)

Inter-ministry dialogue

Stakeholder forum

Advisory & training services

 Confidence Building (regional & subregional)

Regional conferences & sub-regional forums Cultural exchanges

5. Applied Training

The Need

Enhanced IWRM capacity
Better distribution
More interaction among water professionals
Next generation

<u>Objective</u>

Strengthen institutional capacity in selected subject areas of WRM



Create or strengthen centres with capacity to develop & deliver programs Major Components

- Building capacity (HRD: short-term)
- -Appreciation seminars for policy makers
- -Workshops for practioners
 - Building capacity (HRD: long-term)
- -Masters & PhDs
- -Establishing and operating fellowship funds
- -Curriculum design and development
- -Regional review of Master's program and modules
- -Development of IWRM teaching materials
- -Standardization and certification of IWRM
 - Promoting basin interchange
- -Establishing and operating the Nile Net
- -Nile Forum
- -Staff Research Development Fund
- -Distance learning

6. Socio-Economic Development and Benefit-Sharing

The Need

Water management as catalyst for broader cooperation & integration Enhanced regional trade, investment & productivity Vision, initiative, capacity -- and interaction

Objective

Strengthen Nile River basin-wide socio-economic cooperation and integration

Project Components

- ❖ Nile Transboundary Development Network
- -Promote exchange and collaboration among researchers and research institutions
- -Focuses on issues and opportunities related to cooperative regional development, integration &
- -Benefit sharing
- -Will include one PI from each NBI country
- -Establish linkages with both the SAPs and other SVP projects
- -Activities shall include analytic support to NBI activities, targeted analysis, case studies, networking activities, dissemination, workshops, exchange of scholar
- -Project SC will use a set of criteria to agree and consider on the work plan submitted by Pls
 - ❖ Nile Transboundary Development Fund
- -Broaden the range of voices heard and deepen analysis of opportunities for cooperative regional development
- -A fund will be established to support a range of related activities
- -Funds will be flexible and responsive to opportunities that may arise
- -Accessed through annual competitive calls, approved by SC and RPM
- -Type of Activities targeted analysis, case studies, "Incubator" workshops, capacity building, dissemination activities
- -A set of criteria to agree and consider on the proposals
 - Project Management
- -Project management, monitoring, reporting and coordination
- -Annual meetings involving PSC and PIs serve as business meetings for the project and also as annual forum for presentation of research, exchange of ideas, and networking
- -Dissemination and outreach
- -Support to the SVP by active participation with the SVP Coordination Project focusing on cross-sectoral perspective



7. Efficient Use of Water for Agricultural -Production

The Need

80% water use for agriculture
Major element of economies
Low productivity
Similar challenges
No regional forum for exchange of
experience

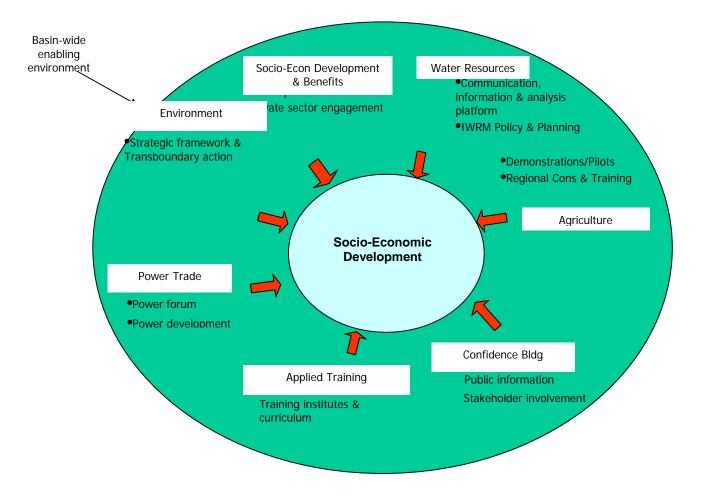
Major Components

Focus: Watershed Management, Community Managed Irrigation & Public/Private Irrigation Water harvesting Community managed irrigation Public/Private managed irrigation

Rolling Out the SVP: Status

			Targeted	Start-Up
PROJECT	Appraisal	Negotiations	Core Staff	Full Effectiveness
SVP Exec & Coordination	✓	✓	Hired	✓
Environment	>	<	Hired	\
Confidence Building	>	✓	Advert.	May-04
Applied Training	\	>	Advert.	May-04
Power Trade	✓	Apr-04	Advert.	May-04
Water Resources	>	May-04	Advert.	Jun-04
Agricultural Water Use	Mar-04	Jun-04	Apr Advt.	Jul-04
Benefit Sharing	Mar-04	Jun-04	Apr Advt.	Jul-04

The shared vision program: project linkages



12 NELSAP Projects identified for preparation

- On the ground investments
- Natural Resources Management projects
- Water Resources Management & development projects

Environment & Natural Resources Management

- ❖ 3 River Basin Management Projects (Mara, Kagera, Sio-Malaba-Malakisi)
- Regional Agriculture project
- Fisheries & Catchment Management Project for Lake Albert and Lake Edward
- ❖ Water Hyacinth Abatement in the Kagera River

Hydropower Development & Power Trade in the NEL region (Bur, DRC, Ken, Rwa, Tan, Uga)

- Rusumo Falls HEP (BUR, RWA, TAN)
- Ranking and Feasibility Study of HEPs in NEL-region
- **❖** Four Transmission interconnection projects:
- Kenya -Uganda; Democratic Republic of Congo-Burundi -Rwanda; Burundi-Rwanda; Uganda-Rwanda

IDEN Projects

- ❖ Integrated Development of Eastern Nile (IDEN) Includes:
- Eastern Nile Planning Model

- ❖ Baro-Akobo Multi-purpose water resources development
- Flood Preparedness and Early Warning
- Ethiopia –Sudan Transmission Interconnection
- ❖ EN Power Trade Investment Program
- Irrigation and Drainage
- Watershed Management.

Process: Lessons learnt

- Visioning process
- Consensus on policy guidelines and the principle of subsidiarity
- From conflict to benefit sharing
- Trust & ownership
- Long term commitment to process & product
- Partnerships
- **❖** Management structures & implementation arrangements.

CHAPTER ONE OBJECTIVES OF THE WORKSHOP

Workshop objectives

The main objective of the workshop was to learn through sharing of experiences from the existing EE&A project component, identify gaps and plan for NTEAP EE&A collaborative activities.

Specifically the workshop is planned to come up with:

- ♦ An established network of EE&A practitioners within the country by forming WG with agreed TOR and office bearers;
- ◆ Learn from good case studies and if possible plant to scale them up as a way of implementation and delivering EE&A;
- Establish Transboundary EE&A opportunities and priorities for the country and specifically for the Nile Basin and;
- ◆ Identified potential partners in the implementation of NTEAP EE&A project within the Basin.

To lead participants on ways of a achieving the objectives, the workshop facilitator (Maushe Kidundo) gave a presentation on environmental education and awareness within the Nile transboundary Action project. The presentation gave highlights on;

Environmental Education and Awareness component within NTEAP

To enhance awareness on the nature of environment and its inter-relatedness in the basin and how its effects on communities, through (i) enhanced public awareness & understanding of Nile Transboundary Environmental issues (ii) networking of secondary schools for project-based learning and (iii) piloting enhanced networking among Universities and research institutions.

Enhanced PA - activities

- Support the development and delivery of TB EE&A campaigns
- Regional training for EE&A practitioners
- Regional briefs for media editors & Environment Journalists on TB issues
- Exchange of environment Journalists & other media professionals between the riparian countries

Enhanced PA - approach

- Formation of working groups in each country
- Launch through a variety of delivery mechanisms
 - o Media (TV, Radio, Newspaper, Websites, etc)
 - o Institutions (religious, learning, social)
 - Organised groups (scouts, youth, women)
- Link with other SVP, components, projects

Secondary schools - activities

- Establish an electronic network of schools for TB EE.
- Build teachers capacities
 - o Training, exchange tours, etc
- Support TB environmental projects within schools
- Organise Nile TB EE award scheme

Secondary schools - approach

- Issue a single contract to an experienced project based learning NGO.
 - Teachers training
- Schools selection by National EE&A working group
- Environmental school projects support through proposals
- Award scheme at National then regional level taking place annually.

Universities - activities.

- Exchange of EE professors, researchers and students between the Nile riparian countries
- Support the development of a university-level course on one or more Nile TB environmental issues

Universities - approach.

- Identify host universities within the basin
- Facilitate a regional meeting
 - Develop exchange formulae (undergraduate Vs Masters, Projects Vs Lectures, etc.)
 - o Develop a selection criteria
 - o Commitment on lecturers' time and support
 - o Develop work plan for the development of university course on Nile TB issues

EE&A Linkages

- SVP
 - o Applied training Egypt
 - o Confidence building and stakeholders involvement Uganda
- NTEAP
 - o Knowledge management, Micro grants, Water Quality & M&E
- Country level
 - Relevant Government Ministries
 - Working group (all EE&A practitioners)

Why EE&A Working Group?

- Establish a Network of EE&A practitioners
- Forum for learning and exchange of information
- Assist in coming up with National EE&A priorities
- Lobby for positive EE&A change
- Take periodic stock of EE&A activities
- Catalyse dissemination and implementation of activities

The Working Group and NTEAP

- Assist in development of National priority activities and single out TB
- Identification of key implementation partners at national
- Assist in advocacy and networking
- A network (channel) for dissemination
- Share experiences and avoid re-inventing the wheel

CHAPTER TWO: THE STATUS OF ENVIRONMNETAL EDUCATION IN UGANDA

This section presents a summary of all the country papers presented during the workshop. The topics of the papers were selected to give an overview of the countries status on environmental education and awareness. The papers looked mainly into the (i) legislation, policy, implementation and coordination strategy (ii) environmental education in institutions of learning and (iii) existing cases studies on EE&A campaigns, award schemes, and the role of media in promoting positive attitude change on environmental issues.

The detailed presentations are grouped IN Chapter five as Annex 1. Below find a synopsis of the status of environmental education in Uganda.

Synopsis of Papers presented

- (i) The status of Environmental Education in Uganda (Beatrice Adimola)
- (ii) The School Environmental Programme (Immaculate Kijagulwe)
- (iii) EE courses in tertiary Institutions of learning (Dr. Daniel Babikwa)
- (iv) NEMA's Public Awareness Programme (Betty Gowa)
- (V) Working with Schools: case study of GICI (Ms Akwi-Okwi)
- (vi) The role of Media in public awareness (Peter Wamboga-Mugirya)

CHAPTER THREE: SETTING NATIONAL EE&A PRIORITIES

I. Tasks

The facilitator informed the participants on the importance of coming up with EE&A national priorities. Through a presentation he guides the participants on how to effectively come up with activities which can be implemented. The group discussions will focus on three thematic areas:

Group 1. Enhance public Awareness

The group to look at

- Campaigns
- Information (EE & A materials)
- Training of trainers

Group 2. EE & A within institutions of learning

The group to look at

- Secondary schools
 - o Curriculum
 - o Environmental activities and awards
 - Tertiary institutions
 - Exchange concept
 - o Course development

Group 3. Networking

The group to look at

- Working group
 - o Role TORs draft (add or delete)
 - o Composition
 - Frequency of meeting
 - Sustainability
 - Media
 - List of activities

II. Formation of groups

The groups were formed in a participatory process. First participants volunteered where they could contribute effectively. To balance the numbers in each group a few people were move to more appropriate thematic areas.

III. Presentations and Discussions

A minimum of four hours was given for discussions and preparation of group presentation. For easy of compiling and getting relevant information, guidelines were issued on the presentation format as follows;

Proble	m Target group (audience)	Activity	Implementation strategy	Key implementers (partners),	M & E How and who	exist strategy (sustainability)

Group Presentations

Group 1 Enhanced Public Awareness



Problems	Target Group	Activities	Methodology	Key implementers	M&E indicators	Exit strategy
1. Exam orientation and compartmentalization of departments in schools 2. Ltd capacity of teachers to handle EE&A in a practical and integrated way 3. Negative attitude among teachers (still consider an extra work) 4. Lack of awareness on part of teachers to link routine activities with EE (general lack of conceptualisation of EE) 5. Teacher training colleges do not orient teachers in EE 6. Lack of culture for people to be responsible for their actions and not to wait to be followed up/monitored.	School administrators TTCs/NTCs Universities (learners Parents Local leaders Teachers Religious institutions NGOs/CBOs	Mapping out the schools Competitions e.g. Thematic essay writing, EE competitions Training and capacity building at all levels (orienting educators for educating for sustainable development) Research and investigations Development appropriate teaching/learning materials (modules, fact sheets, pamphlets, games, booklets, posters) Community outreach programmes Forming networks Micro and macro Projects in schools, institutions, community EE awards Field trips Music, Dance, Drama Listening programme (radio) Documentaries of best practices for wider sharing e.g. Gayaza waste management Nile news letter, news paper pull outs Website link on EE Awards/contests based on the Nile, school community links Professional forum to exchange ideas and develop strategies for improving EE Help institutions to develop their own environmental policies Research on thinking and learning styles – IACE, School of education, institute of education. Computers connected to internet Develop interactive training materials (distance learning method-CD, written module and face to face) Nile watch for primary schools Exchange concept Research (sponsor MA students to undertake research, participatory action research for scholars and environmental practitioners Modules on different environmental aspects Teleconferences between countries (debates on issues, Exchange visits and study tours (lecturers, students) Interactive websites and exchange of information through emails Exchange of materials (based on themes Professional forum to exchange ideas and develop strategies for improving EE Photography competition Influencing university leadership (guild, tribal associations, departmental associations, scouts, wild life clubs, religious associations) Course development Multidisciplinary teams in designing and implementing EE Learning programme to re-orient educators (training programme)- Value clarification to be integrated at all levels (love, respect and concern for the environment, critical thinking, creativity, dignity of labour	Video CPD (continuous professional development) Value clarification Campaigns (Keep your country clean)- should cut across ministries, look different activities and integrate EE e.g. target education week, science fair etc Environmental policies at all levels (institutions, departments, offices, homes) on various issues e.g. savings energy, waste management, water, Review teaching and learning materials and methods- oriented to critical thinking e.g. use of generative theme approach. Thematic Essay Contests Lobby local partners to fund EE activities	10 Pilot secondary schools (bringing in different aspects of the Nile 10 core PTCS 5 NTCS 2 Universities NEMA UWEC Ministry of Education NGOs/CBOs (Jinja District Wildlife Association, Environmental Alert) WID Local Governments (District, Sub-county Local authorities Neighbouring communities Media (EJAU	No of people trained No and type of competition s held No of Project Incomes No Rive banks restored Level of awareness Surveys conducted Conflicts reduced	Extending the project to other schools before project ends School network on Nile basin Institutionalised Policy Empowerment of the learners through training Strengthening school community links Strengthening capacity of school to look for money and building pa Partnerships Influence budgeting of schools through Board of Governors Institutional income generating activities

Group 2 EE&A within Institutions of learning

Problem	Specific activity	Target group	Implementation strategy	Key implementer	M&E	Exiting strategy
Integration of environment into policy making and implementing organs	Sensitise and educate policy making and implementing organs on key environment management strategies	Local leaders MPs Lead agencies at national Technical HODs at local government level	Information needs assessment of all partners Design programs e.g. study tours, breakfast meetings, seminars Maintain up-to-date mailing list for targeted dissemination	NEMA in collaboration with: • EJAU • UMA • DEOs	•	
Inadequate capacity of partners to implement public awareness activities	Enhance capacity of partners to carry out awareness activities responsive to NTEAP activities	NGO EJAU/media UMA Schools Lead agencies Environment Officers	Exchange visits Training Internships Strategic action planning Targeted reviews Support to specific partners, NGOs e.g. equipment	NEMA in collaboration with: NEMA EJAU UMA DEOS	•	Integrate into the programs of partners
Lack of awareness in the community Diverse media with limited reach Low level of education of the community Diversity of local languages	Use multi-media approach to carry out public awareness	NGO EJAU UMA Schools Lead agencies Environment Officers Radios TV	Categorize population (KAP and media use survey) Determine messages according to KAP survey Produce materials eg Nile talk, fact sheets, information videos; press briefings; Develop work plan Design multi-media programs utilizing local languages Implement work plan	Environment Alert in collaboration with: NEMA EJAU UMA DEOS	Develop M&E instrument for the work plan Monitor and evaluate the work plan using the evaluation instrument	Build capacity to do public awareness
Inadequate networking and coordination of public awareness activities	Improve networking and coordination of awareness activities	Media NGOs DEOs Lead agencies	Email discussion list Regular meeting forum of practitioners involved in awareness Continuous professional training for practitioners Materials e.g. Nile Talk Design and implement joint activities e.g. public lectures	NEMA in collaboration with: NEMA EJAU UMA DEOS Practitioners	Develop M&E instrument for the program Monitor and evaluate the campaign using the evaluation instrument Evaluate the performance of the network in line with the strategy	Ensure pubic awareness is part of the EEA WG
Inadequate monitoring and evaluation of public awareness	Improving the monitoring and evaluation of awareness	•	Joint monitoring & evaluation every 2 years Media monitoring through independent monitors Develop monitoring indicators Periodic reviews and impact assessment	Environment Alert in collaboration with: • EJAU • UMA • DEOs	Monitor and evaluate the program implementation Share lessons with implementing partners	Development of indicators

Group 3 Networking

A. Media Activities

PROBLEM	TARGET GROUP	ACTIVITY	IMPLEMENTATION STRATEGY	KEY IMPLEMENTORS	M&E	SUSTAINABILITY
Limited capacity to address EE&A issues	- Media house owners and environmental journalists	- Sensitisation of the media house owners and environmental journalists	Organize seminars & workshops for media house owners and environmental journalists separately Organize separate public dialogues for both categories	- EJAU, NEMA, Media houses, CBOs, NGOs, private sector, development partners, NTEAP, Government ministries, NBI Secretariat	- Amount of time given to EE&A on radio and tv - Number of topic related call-ins	
		- Training for EJAU members	- Short courses both within and out of the country for EJAU members	- Training Institutions, NEMA,UNEP, NCDC, NBI secretariat	Content of the stories on awareness and advocacy	
		- Exchange and exposure visits within and out of the country for both media house owners and environmental journalists	- Local and Transboundary excursions	NTEAP, EJAU, NEMA, NBI secretariat	Number of sources quoted in the stories	
		- Recognize and award environmental journalists for outstanding performance	- Hold a Sir Ndyakira Amooti paper presentation event and include an award giving ceremony	- EJAU, NEMA, NBI secretariat, NTEAP, Media Council, National Institute for Journalists in Uganda(NIJU)		
		- Identify and establish linkage to strengthen the capacity of non EJAU environmental journalists	- Surveys	- Media houses, EJAU		
		- Equip EJAU for information collection and dissemination	- Buy media equipment	- Media houses, EJAU		
2. Weak linkages between the media house owners and other players resulting to inadequate access to information	- Both media and other institutions, District Environment Journalists at ground level.	- Organize regular harmonization meetings.	- Local language radios operating around catchments areas and River Nile tributaries	- NBI secretariat, NTEAP, NEMA	- Number of meetings and public dialogues - Comparison in the rate of conflicts before and after the activities	
	- The community	- Establish a media EE&A newsletter	- Involvement of the communities in media and Information	- EJAU, NTEAP	- Feedback from the community	

PROBLEM	TARGET GROUP	ACTIVITY	IMPLEMENTATION STRATEGY	KEY IMPLEMENTORS	M&E	SUSTAINABILITY
			Education Communication		after accessing	
			message development		the information	
			- Generate feedback from the			
			communities			
		- Have quarterly				
		public dialogues with:				
		political organs,				
		technical organs,				
		resource users				
Most media	- Communities on		- Mobilize resources in form of	NEMA, EJAU, NTEAP, NGOs,	- Reviews	- Constant flow of funds
houses do not	the resource		technical and financial support, Tv	Government departments		- Regular interactions
prioritize	fringes		documentaries, films, radio			- Regular reviews
environment	(catchments		features, photos, video and radio			
related messages. There is therefore	areas, river		spot messages, video clips			
	banks, farming		- News reports			
little or no funding for these	communities)					
messages which						
makes it						
impossible for the						
journalist to						
implement the						
work.						
4. Many people have	- Rural		- Organize rural video systems	- EJAU, NEMA, NTEAP,	-Follow up and	- Provision of mobile
little or no access	communities		- Rural listening groups	Government departments	reviews	equipment
to television, radio			-Formal school viewership/	,		- Flow of funds
and print media			listenership			
5. Little time for	Members of		-Video recordings	NEMA, NTEAP, EJAU	- Follow up and	- Constant update of
Members of	Parliament		- Video and radio clips		reviews	messages
Parliament to						
access media						
messages on the						
media channels						

There is a need for the establishment of resource centres particularly for EJAU in its implementation of the Working Groups objectives.

B. The National EE&A Working Group

I. The Terms of Reference for the National Working group

The aim of the National Environment Education and Awareness Working Group (NEE&A WG) is to plan, coordinate and facilitate the EE&A activities and to exchange knowledge and lessons learned from National and Nile Basin experiences. Specifically the NEE&A WG will;

- 1. Catalyse EE&A activities within the Nile Basin.
- 2. On an annual basis develop and ensure implementation of national action plans with emphasis on Transboundary activities for the basin.
- 3. Lobby Governments, development partners and civil societies to support new and innovative issues on environmental education and awareness.
- 4. Update the country status on environmental education and awareness.
- 5. Hold annual multi-stakeholder EE&A workshops to review progress and plan for activities for the coming year and exchange of ideas and documentation of lessons learnt.
- 6. Facilitate and disseminate lessons learnt through participation in different forums and effective use of print and electronic media.
- 7. Ensure that accurate and correct information reaches the intended target groups through effective relay pathways.
- 8. Highlight National Transboundary EE&A issues and interventions that could bring about behavioral change.
- 9. Ensure active participation on National occasions to mark international environment related days including, the World Environment Day, World Water and Meteorology Day, World Wetlands Day, World Food Day etc.
- 10. Lobby for the incorporation of EE into curriculum at all levels of formal education.
- 11. Carry out periodic assessment on the status of EE&A within the country.
- 12. Co-opt and/or establish task forces as need may arise.

II Working group Composition

The Working Group will be composed of individuals from the following institutions;

Environmental Journalists' Association in Uganda, National Environment Management Authority, Wetlands Inspection Division, National Curriculum Development Centre, Ministry of Education, Environment Alert, Uganda Manufacturers Association, Directorate of Water Development, Universities, Nile Basin Initiative, a District Environment Officer, LAKIMO, Uganda Women's Network, National Agricultural Advisory Services)

The Working Group will write to the head of the above institutions accompanied with the Terms of Reference and the name of the suitable identified individual.

III Frequency of meetings

The Working Group will meet quarterly for the first year and this will later be reviewed.

IV Working group Sustainability

- The Working Group Secretariat will be institutional based.
- The secretariat will be based at NEMA because it hosts the NTEAP and NBI can fund it.
- NEMA will identify the secretariat from within the established structure.
- The Working Group representative from NEMA will be the coordinator.
- The secretariat will be independent of the hosting institution's gagging/hijacking.
- In addressing the issue of the media's role in EE&A, the group looked at the problems affecting EJAU and how best these can be solved so as to let them perform effectively.

CHAPTER FOUR

CLOSING CEREMOMNY

I Closing Remarks

By Ms. Prosy Mulyowa: NCDC.

The Director, District Support Coordination and Public Education – NEMA,

The Lead Specialist, Environmental Education and Awareness – NTEAP,

The NPC - NTEAP,

Workshop organisers,

Dear Participants:

I have the pleasure to address you on the closing of the first workshop of the Nile Transboundary Environment Action Project.



I have participated in the workshop and note that a lot of interactive discussions have been held. It has been a productive workshop.

During these two-day deliberations, participants were able to discuss Environmental Education strategies and approaches.

I note that we discussed:

- (i) Formal Environmental Education -and noted that EE has been integrated at the pre-primary and primary level. The integration at secondary has been embarked upon and hopefully it will be completed in the near future.
- (ii) Non-formal environmental education that which focuses on mobilisation of communities through action. Here we noted NGOs play a major role in mobilising communities in areas where they are based, and
- (iii) General public awareness the use of the mass media a deliberate effort to ensure that environment information flows to the public regularly.

In Uganda, Environment awareness is being undertaken in a cross sectoral manner and by different institutions. The NGOs, the civil society and the different institutions of government such as the Uganda Wild life Authority (UWA), National Forestry Authority (NFA) as well as the National Environment Management Authority (NEMA) are all in partnership to deliver effective environment education and awareness.

The Local Environment Committees (LECS) that are statutory institutions set up countrywide are also a forum that is used to help in environmental awareness. LECs exist at the sub county level, parish level, village level and at urban centres.

We hope that the recommendations and actions developed out of this workshop will utilise these institutions.

While a lot of work is being undertaken with regard to EE and Awareness, further input is still necessary.

There is need for further capacity building. Some district environment officers, for example, are still new and they need additional communication, advocacy and networking skills to increase the effectiveness of the Environment Education and awareness efforts.

The country needs to enhance cross-district and cross-national border collaboration in awareness. The starting of NTEAP to address some of the needs is therefore timely and most welcome.

A word of caution still lingers in my mind. And I want you dear participants to think about it as you go back to your workstations. There has been awareness raising in a number of fora, including, seminars, workshops, school programmes as well as competitions. But action on the ground has been slow, why???? A lot of Posters have been developed as well as training workshops. Still progress is slow. May be there is something we still need to address to achieve effective on the ground action.

As a Ministry we do appreciate the environment as the basis of our health and wealth. We shall therefore ensure that educational policy of integrating EE at all levels of education is implemented. This will facilitate training at the pre-service level and we shall increase in service training to ensure that the teachers are well grounded in methodology to deliver the integrated content in order to bring about a change in behaviour; which is beneficial for this and the next generation.

The Education Standards Agency will monitor the schools to ensure that the teaching is both theoretical and practical to bring about practical ground activities.

I note that an awareness-working group is formed. This working group needs to start thinking about this concern so that what is developed in NTEAP goes practical. I therefore wish to reiterated the NEMA Executive Directors plea, that practical on the ground activity should be the target, as it is on the ground action which is necessary and can create visible impact.

I wish to urge you, dear participants that Networking among you should be kept up. This is the beginning of a closer Environmental awareness. In fact, the first out put of this workshop should be the linkages created these two days and these linkages should therefore be kept alive. I understand addresses have been registered; these should be exchanged among you people.

Finally, as I conclude, I wish to thank funding agencies for this workshop as well as all the partners here and to ask that, let the collaboration continue.

I thank you for listening to me and I take this opportunity to officially close the workshop.

- II Workshop Evaluation
- III Workshop Recommendations

CHAPTER FIVE APPENDICES

I. Papers Presented

Status of Environmental Education in Uganda 2004

Beatrice Adimola EEC, NEMA badimola@nemaug.org

BACKGROUND

Environmental education is dynamic and has evolved in different ways depending on the interpretation and prevailing circumstances. Education is still narrowly perceived and the interpretation needs to be broadened. Generally, basing on the evaluations that have been carried out there has had some impact on many people raising people's level of awareness with varied levels of response.



LEGISLATION AND POLICY PROVISION

They are legislation supporting EE public awareness. Policy provisions that give direction. They are found in the following documents.

The constitution of the Republic of Uganda (1995) The National Environment Statute (1994) The Government White paper on Education (1992) The National Environment Act (2000) The National Forestry and Tree Planting Act (2003)

STRATEGIES

The strategies provide the general framework needed for the development of a comprehensive national environmental education and public awareness programmes.

The strategies in place target different groups of people with some of the activities overlapping. These are:

The National Environmental Education Strategy for the Formal Education Sector.

This strategy targets institutions from pre-primary to the University. There are seven programme areas in the strategy namely curriculum

*The Non Formal Environmental Education and Community Training Strategy*Promotes training the communities

The National Public Awareness Strategy and the Local Government Awareness Strategy Cuts across all sectors of society and levels of government

IMPLEMENTATION APPROACHES

Some of the implementation approaches developed for the different target audiences are:

PARTNERSHIPS

Public private partnership with schools, communities government and the private sector. EG Shell Uganda, Living Earth Uganda and Communities

Trainer of trainers (TOTs)

Visitor and Interpretation Centres

Training

Traditional Media and ceremonies

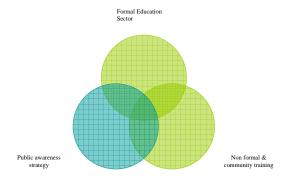
Drama, role playing music

Demonstrations

Competitions

Projects

Public lectures



INFORMAL ENVIRONMENTAL EDUCATION

- Targets the communities eg farmers, extension workers, urban poor, youths, District leadership, regulated communities
- eg. communities bordering parks and forests, fisherfolk
- Problem focussed
- Location specific
- Stresses awareness and provision of information

CAMPAIGNS

- Tree planting
- World Environment Day themes
- WASH- water, sanitation and hygiene in urban areas
- Rural water and sanitation
- Cholera, malaria, river blindness
- Waste management
- Wetlands management
- Wildlife conservation

FORMAL EDUCATION STRATEGY

- The strategy comprises seven programme areas:
- Curriculum integration at all levels
- Competence building
- Materials Development
- Research
- Coordination
- Monitoring and Evaluation
- Participatory actions

MATERIALS DEVELOPMENT

- Print- posters etc by NEMA and NGOs
- Supplements in the Daily Papers
- Brochures
- Training Manuals
- Leaflets
- Newspaper pullouts
- Activity sheets

ENVIRONMENTAL EDUCATION ACTIVITIES

- Drama
- Energy conservation
- Waste Management
- Tree planting

- Public Lecturers
- Demonstrations
- Exhibitions
- World environment celebrations
- Conservation festivals

ACHIEVEMENTS

- Increased level of awareness from trees to diverse issues e.g. wetland, waste management, soils
- Primary School Curriculum & SEEP
- Increased coverage
- Community Training
- Political Support and leadership
- Competitions

EE PRACTITIONERS

- Government departments
- National Forest Authority
- Visitor Centres eg Mabira Ecotourism Centre, Mpanga Forest, kalinzu, Pabidi
- Directorate of Water Development
- Ministry of Tourism Trade and Industry
- Uganda Wildlife and Education Centre
- Uganda Wildlife Authority- Conservation Education
- National Parks
- IUCN CEC
- Mt Elgon Exploration Centre
- Bwindi Mgahinga Trust
- UNHCR
- Refugee settlements in West Nile
- NGOS e.g. Environmental Alert, Living Earth Uganda, Nature Uganda, ICR, Straight Talk Foundation
- Cross Border Environment Projects e.g. ARCOS, Lake Victoria Environment Management
- CBOs e.g. UCODEA, UVEAP among many others
- Voluntary organisations e.g. SPW, VSO, Peace Corp,
- Jane Goodall Institute Roots and Shoots chapters
- Wildlife Clubs of Uganda
- Nature Uganda
- Various Trainers of Trainers environmental activists

SUCCESS STORIES FOR REPLICATION

There are a number of successful case studies incldunig:-

- SEEP
- IUCN- Mt Elgon Exploration Centre
- ICR
- Wildlife Clubs

OPPORTUNITIES

- Networking through Computer technologies on selected themes
- Exchange of information
- Twining schools
- Partnership

CONSTRAINTS

The major challenges facing

- Conceptualisation takes time
- Limited funding
- Inadequate information sharing and exchange
- Human resources capacity
- Limited opportunities for regular consultative meetings

- Limited access to and management information technology
- Behaviour change takes time

CONCLUSION & RECOMMENDATIONS

1. Greater collaboration and inter linkages horizontally and vertically



- 2. Broaden EE to Education for Sustainable Development which addresses a variety of issues like poverty, human rights violations, gender discrimination, warfare, and many others
- 3. Develop distinct trans-boundary EE programmes and activities addressing water and other issues
- 4. Research on how people learn and change behaviour
- 5. Build capacity to develop local ESD programmes
- 6. Exchange studies and visits
- 7. Restoration projects

School Environmental Education for schools in Uganda

'Environmental Education is a powerful tool for sustainable development'

Immaculate Kijjagulwe Urban Environment Uganda P. O. Box 6202, Kampala, Uganda ikijags@yahoo.co.uk

INTRODUCTION

One of the National goals of education and objectives of education is to eradicate illiteracy and equip individual with basic skills and knowledge to exploit the environment for self-



development as well as national development for better healthy nutrition and family life and the capability for continued learning.

The Ministry of Education promotes scientific, technical and cultural knowledge, skills and attitudes needed to enhance development including democratic and participatory planning, administering and management by all stakeholders; the ability to use data and information for decision making, awareness and concern for conservation of the environment.

Education as we are all aware is a powerful tool for transformation of a society in all areas of life -cultural, economic, security, behavioural, good governance, resource utilization, etc. The role of Education therefore in liberating people from the vicious circle of poverty, dependence, ignorance, disease and indignity cannot be underestimated.

The government started exercising control over education by establishing a directorate of education. In the eighties there was massive expansion in the number of schools and higher enrolment in primary and secondary level, but the planning was neither properly done nor coordinated.

In 1992, the Government White Paper entitled education for National integration and development by the education Policy review commission gave a new face to education. It advocates for quality of teachers and education. Other enabling laws and policies have also been developed and implemented (enacted).

BACKGROUND TO SEEP

The objective of Environmental Education (EE) is to create awareness, equip individuals with knowledge and skills, motivate them to participate and take action in Environmental management and in the long run change their attitudes and behaviour towards the environment.

The major aim of EE is to produce holistic people with improved awareness and understanding of the environmental issues with the view to promote the conservation and wise use of nature and the natural resources for sustainable development.

EE has evolved from Nature study; a subject that was offered to a few, to clubs, later into uncoordinated extra curricular activities organized by individuals who had interest then to policy, strategy and into a coordinated programme.

School Environment Education Programme started in 1996 after a study on 'A whole school approach to implementing EE in Secondary schools in Uganda'. Six (6) pilot Secondary schools were included. It has now spread to over 5000 primary and 200 secondary schools in about 30 districts in the country.

IMPLEMENTATION / COORDINATION MECHANISM

The National Environment Management Authority (NEMA) drives the process. It coordinates the initiatives, gives guidelines and direction, planning, encourages and facilitates contributions of the other players (NGOs...), develops and implements training programmes and provides support EE materials.

The Ministry of Education and Sports (MOE&S) supports the programme through its agents and permits the activities to go on. The Ministry also has the responsibility of ensuring good and sound standards of education at all levels. The District education Office works hand in hand with the others to monitor and evaluate the quality of education and school environment. They organize competitions, supervise schools and promote synergy with other departments. They are coordinating the school environmental education programme in the different local authorities. The District Environment Officers give technical support to the schools and also help in clarifying environmental issues in the districts.

The National Curriculum Development Centre (NCDC) redesigns curricular to meet the goals and objectives of education and also carries out research and evaluation in curriculum development for schools.

The new curriculum for pre-school to primary level has been in use since 2000 with EE integrated into all subjects using the cross curriculum approach.

Secondary schools

There have been a number of carrier subjects where environment topics have been taught e.g. Biology, Geography, Agriculture, Chemistry, Home Economics, etc but a more integrated curriculum is under way.

The Uganda National Examinations Board (UNEB) plays an important role in planning, conducting and managing the various public examinations, primary, 'O' level, 'A' level TTCs and technical schools.

Over the years UNEB has set questions on EE especially in the carrier subjects for 'O' and 'A' levels, English Language and General Paper. At primary level, environmental concerns are tested in any subject.

Implementation of the Uganda Primary Education reform programme by out reach factors, core PTC staff members (CCTS) under (TDMS) Teachers Development Management system. The system provides distance education for both untrained and under trained teachers, enables the teachers to do their normal work in the school while they study.

Some CCTs have, been trained in EE and do coordinate primary school EE activities in their cluster. Others have trained teachers in EE and helped them to further integrate environment topics in their plans (scheme of work). CCTs also monitor schools, projects and activities and also provide materials in the resource centre. Some core, PTCS are helping in coordinating the District EE activities for the schools.

The National Trainers of Trainers (TOTs)

This is a team of about 100 environmental education practitioners. They provide leadership at the grassroots level, train teachers, facilitate the activities, generate innovative approaches, promote networking, and participate in materials development adding to the data base for EE.

Local Councils, Politician and others provide financial and moral support plus including linking schools with the neighbouring communities. Some of these are members of the school management committees.

Other Stakeholders, NGOs, Volunteers, Clubs contribute to SEEP by training, organizing environment competitions and material development.

Environmental Education Materials

- NEMA prepares most of the EE materials and teachers guides but also works with other providers
 e.g. NGOs, institutions, ICR, SPW and Living Earth Uganda to develop EE materials. The materials
 are designed flexibly to permit suitable adaptation for use across the country and at different
 levels
- In the training workshops for the teachers, a day is set aside for developing a variety of EE materials for training, awareness and learning.

 Materials like posters, games MD, radio/TV articles, charters, brochures etc are prepared in English and local languages.

The schools are encouraged to develop innovative programmes and EE materials to address their environmental concerns using locally available materials.

HOW DOES School Environment Education Programme WORK?

Seven (7) step procedure for schools to adapt:

- (i) Appoint a coordinator.
- (ii) Select a committee.
- (iii) Develop an implementation mechanism
- (iv) Set goals and objectives.
- (v) Develop an action plan (Audit the school).
- (vi) Implement and monitor the programme.
- (vii) Evaluate the programme and document successes for networking and replication.

It takes about one year for the school to formalize the process.

SCHOOL NETWORKS

Dynamic networking among schools has been initiated and sustained by some schools and districts. Others have successfully participated in regional and international environmental programmes for example

- UNEP Painting competitions
- Twining with Kenya & Tanzania schools
- Victoria watch led by Entebbe S.S.S.
- THE GLOBE; Global learning and observation to benefit the environment. A worldwide science and education programme coordinating the work of learners, teachers and scientists to study and understand the Global environment.
- WORLD LINKS
- Children Conferences
- Eco-Schools; encourages school children to carry out sample activities in their communities.

SCHOOL PROJECTS AND CO-CURRICULAR ACTIVITIES

SEEP promotes the initiation of school EE projects for awareness, creation, conservation and proper environment management, restoration of a degraded environment, physical improvement of the school, income generation, educational purposes, skills acquisition by the learners and teachers, community school links and research or investigative studies.

The learners and all the other stakeholders have to be involved at every stage of the programme (project cycle). Examples of EE projects:

- Gayaza High School herbal gardens
- Kings' College Budo Research on indigenous knowledge in the neighboring communities
- Gulu Eco-schools
- Kiswa Primary school wetland watch
- Kasese schools with communities to carry out restoration activities



Gulu Eco-kids club

Schools have initiated and are running EE projects. Some schools have established environment clubs while others use the existing clubs e.g. Wildlife, Scouts, Girl-guides, Debate, Interact, Drama, Geography and Biology to carry out environment activities. Many schools use Music Dance & Drama (MDD) or Science fairs to create public awareness on environmental issues. Sometimes parents and members of the management committees join hands with the schools to work on the projects such as: planting of grass or flowers in the school compound, labelling of trees with their respective scientific names, installing energy saving stoves in the school kitchens, etc.

COMPETITIONS AND AWARD SCHEMES

Competitions are organised at district level and a rotating trophy is awarded to the best school. The top six (6) schools receive prizes.

The best school in each region gets an award during the National World Environmental day celebrations on June 5th.

The best EE providers and practitioners also get an award on 5th June too.

Some schools organize internal EE competitions (inter house / inter class where presents like goat roasting or outings and others are given.

International competitions; children are encouraged to participate in these competitions.

Mabira and Mpanga forest competitions.

Provision of seedlings to schools for their tree planting projects by forest department in several districts.

ACHIEVEMENTS

- SEEP has been evaluated by NEMA (lessons learnt and recommendations for future planning).
- The District School Environment competitions
 managed by the Districts are running in some districts for the last four consecutive years. It is
 spreading to many others (over 20 districts).



- Promotion of collaborations and participatory planning at the district and school levels.
- Tremendous change in the physical appearance of some of the schools involved in SEEP. (schools in Gulu, Lira, Kampala, Iganga, Kasese, Ntungamo)
- Schools carrying out several research on various environmental issues affecting their schools community and the Nation in general for example wetland watch, stream water, water quality, forest watch, lake, range lands, river shores, waste management, biodiversity, etc.

This enhances their academic work (knowledge) in other subjects.

Developed leadership skills of TOTS and EE coordinators.

Several have been promoted to headship/ Deputy Headship (Professional development for the teachers involved).

- Acquisition of environmental management skills by the teachers, learners and communities neighbouring the schools.
- Complements other government programmes for example sanitation, health education, nutrition

and minimum standards' requirements for schools.

- Involvement and participation in regional and international environmental programmes.
- Documentation of EE activities and case studies by the concerned schools is on the increase.
- Some EE coordinators and CCTs are developing EE materials such as posters, pamphlets, books and brochures etc which are taken to the district resource centers for networking.
- Schools are running income generation activities under school environment competitions for example:
- -Waste recycling / composting
- -Water harvesting
- -Food supplements / nutrition- school gardens



- -Energy saving stoves
- -Nursery beds establishments / wood lots
- -Zero grazing (animal raring) etc.

MAIN CONSTRAINTS ON EE PROGRAMS WITHIN SCHOOLS

- With the liberalization of education, many private schools have mushroomed all over the country especially in urban areas. Many of these are in areas where they cannot effectively participate in SEEP activities (wetlands, on road reserves, dumping grounds, etc) nor have no space for practical activities.
- Schools are congested and teacher: pupil ratio in primary schools has gone up. The teachers are overworked and not willing to participate in practical activities. They teach environment theoretically.
- Budget allocations especially for UPE schools are rigid and limited so many schools have no funds to support SEEP activities.
- Overcrowded time tables for both primary and secondary schools plus the public demand of 4 points in PLE 8 points for 'O' level and 4As for 'A' level. So teaching is geared towards passing exams without any provision for assessment of other objectives of Education (education for self-reliance); schools think that SEEP is a waste of time since it is not 'examinable".
- Some districts are not well coordinated due to sometimes internal problems and this affect school activities including SEEP.
- Not all teachers are trained in environment education so some schools have no one to drive the process. The change in curricular is not always matched with training of teachers hence the gap in knowledge and integration of environment concerns in teaching topics.
- Neighbouring communities that are aggressive to SEE Projects and activities for example vandalizing plants, latrines, bore holes, classrooms, playgrounds, trespassing, dumping in the school compound. Others are not willing to carry out joint clean up campaigns and activities with the schools (clearing campaign for water sources, trading centres and attending school open days).
- The number of active secondary schools is still very low and sometimes teachers demand for additional pay to carry out SEEP activities.
- EE materials are limited because the cost of production is very high.
- Teachers at times leave all the work to SEEP coordinators or teacher on duty which at times makes the programme collapse if that teacher is transferred to another school.
- Changing behaviour and attitudes takes long so some EE coordinators administrators and teachers get discouraged when they do not register quick results. Some give up the programme immaturely.

RECOMMENDATIONS AND OPPORTUNITIES

- The district school environment competition should become a national competition coordinated by the ministry, just like music and science fares.
- More girls in schools is a great opportunity for more environment managers to acquire conservation skills for sustainable development (women and the environment). High enrolment (7 million children in primary schools) is an opportunity to widen the coverage of SEEP.
- The in-service training of teachers in EE can be integrated in the other trainings and CCTs could be facilitated more to train and develop EE materials with the teachers within their cluster schools throughout the country.
- Decentralization promotes decentralized planning and management within the respective local authorities. This has helped primary schools' management a lot. The system could be studied and extended more to include secondary schools.
- The MOE&S can use her good office and working relationship to lobby the private sector to support SEEP especially in the development of EE materials and training of teaches just as they do with sports.
- The School and Health inspectors can be trained / facilitated to integrate monitoring of SEEP activities and projects in their routine work plans.
- A number of schools have acquired computers and can benefit a lot if connected to the Internet. The costs are still too high for individual schools.

Conclusion

- Children and Youths will inherit the resources of the earth hence the need to educate them with the right perspective, knowledge and skills to revert the present trend of environmental degradation.
- Children also bring in a lot of enthusiasm and energy that can be harnessed to become a force for sustainable development.

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- (i) Tutors' Handbook, Ministry of Education
- (ii) Evaluation Report for Formal Education, NEMA
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- (iv) The Government White Paper on Education

Environmental Education courses in tertiary institutions of learning

Daniel J Babikwa (PhD.) Makerere University, I. A. C. E. P.O. Box 7062, Kampala, Uganda danbab@iace.mak.ac.uq

Introduction and background

The major purpose of this paper is to throw some light on the status of Environmental Education in Ugandan tertiary educational institutions. It specifically touches the issues of policy and legal foundations of EE in tertiary institutions and engages in pertinent



discussions of some theoretical and conceptual issues which help us to analyse the character of EE programmes in tertiary institutions. The paper in particular comments on the character of the existing environment related courses although it avoids giving an inventory of courses and instead critically analyses of the courses to draw lessons that can inform future EE programmes in such institutions. Based on the same logic, I decided to focus on the two larger universities namely Makerere and Kyambogo. The two institutions have a broader coverage of environmental programmes and are more likely to provide a broader spectrum of lessons to inform the future design and delivery of EE, rather than establishing the numerical status of EE programmes in the institutions. The paper winds up by highlighting the main constraints in offering EE as a course in a tertiary institution, existing opportunities and key recommendations.

Legislation and policy

Environmental Education is a relatively new area of study in Ugandan tertiary institutions although a number of environmental related courses and disciplines have been in existence throughout the existence of such institutions. The recent overt emphasis on and upsurge in the number of environment related training programmes in the different tertiary education institutions can be traced to the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro. Chapter 36 of Agenda 21, the official document of the conference which also informs Uganda's Environmental policy emphasises the role of Education and Awareness in achieving sustainable development.

Uganda's National Environmental policy (1994) stresses the central role of Environmental Education and Awareness as a strategy for achieving sustainable development and environmental protection. People's involvement in environmental planning and management is seen as largely dependent on the role of EE & A.

The policy points out three major roles for tertiary institutions (MNR 1994) namely to:

- Increase awareness and understanding of the need for sustainable environment management among different stake holders
- Develop skills necessary for the implementation of national programmes;
- Conduct demand driven research to inform the proper management of the country's environmental resources

The policy stipulates that the teaching of Environmental Education be mandatory in all formal education institutions including Universities and other post secondary institutions. It also calls for the strengthening of existing higher level institutions to offer programmes tailored to produce environmental economists, planners, trainers, lecturers, lawyers and enforcement officers and to conduct research that will inform environmental management processes in the country.

The NEAP specifically mentioned MUEINR, MISR, Institute of Adult and continuing Education, Institute of Statistics and applied Economics, Faculties of Law, Agriculture and forestry, as the ones to spearhead the implementation of EE & Awareness in Makerere University. The faculties of Arts, Social Sciences, Technology, Education, Human and Veterinary medicine were surprisingly not included in

the list of central actors, which in a way reflects a limitation in the dominant perception of the environment and environmental issues by its formulators.

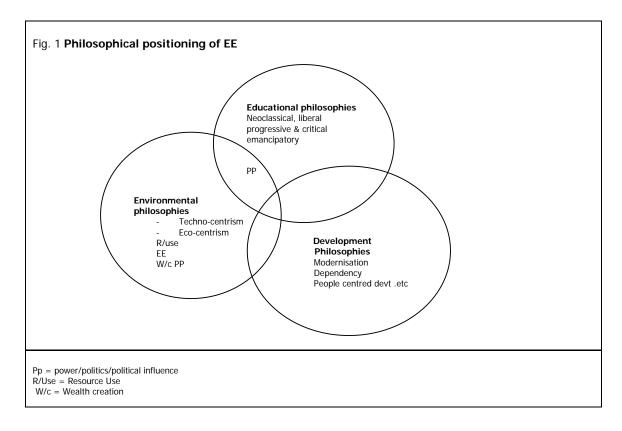
Since the formulation of the policy and the publishing of the NEAP, the number of tertiary institutions in the country has tremendously grown, together with the courses meant to address different environmental concerns. What is important however is to acknowledge from the outset that education is a complex matter that is often taken for granted and many times misused leading to contradictory outcomes. In the light of this, I have decided to start by a brief discussion to clarify the key theoretical and conceptual assumptions underlying education practice in general and EE in particular.

Some theoretical and conceptual issues of environmental education

My analysis of EE in Ugandan tertiary institutions is premised on the view that knowledge is never neutral and neither are scholars who produce it. Like knowledge, education too is not a neutral process or activity. Different people will therefore conceptualise EE and the related processes differently. The different conceptualisations certainly influence the practical actions taken by educators to address environmental matters, whether the educators are aware of it or not. Thus the curricula, methods, learning activities and outcomes always reflect the dominant thinking of the educators and the socio-political and professional institutions they belong to. Analysing EE therefore calls for clear understanding of the different philosophical orientations to education and their implications on education practice, which helps to explain why educational Programmes yield particular learning outcomes.

Educational, environmental and development philosophies as foundations for EE

EE is particularly a complex concept and its implementation a composite venture informed by diverse philosophical currents; including philosophies of development, education and environmentalism.



Educators writing from a critical perspective have identified three broad educational orientations (Kemmis et al 1983) namely: the neoclassical/vocational, liberal/progressive and socially critical/

transformative orientations. The orientations are classified according to the underlying knowledge-constitutive interests¹. While this classification might have its own limitations, it also has considerable value, particularly, in characterising and explaining different educational processes and their related outcomes. The framework of educational orientations in table one (1) represents the various angles from which different educators operate, and view the world of education and educating. These professional positions are ideological, and they always consciously or unconsciously filter into the educational practices by different people, influencing the direction of educational programmes and their ultimate outcomes.

In the case of EE, in addition to the educational orientations of practitioners, the way different environmentalists interpret and respond to environmental challenges; and the dominant development discourses (fig.1) influences its direction and emphasis. This is because by its very nature, EE is not education for education's sake, but responsive to socio-economic, human and ecological concerns of society. This is largely why the character and dimension of environmental education, represents a manifestation of the different environmentalisms (Pepper 1986).

As educators try to respond to the broad range of sustainability concerns, their minds are actually preoccupied with not only the desire to educate, but also do so in such a manner that satisfies their interpretation of the environment, environmental concerns and their world view of good environmental management. This probably explains the different dimensions of EE. Educators informed by techno-centric environmentalism for example design technocratic educational programmes that not only exhibit their confidence in the potential of science, technology, 'experts' and regulations to address sustainability concerns, but also fail to recognise the central role of key stakeholders (e.g. local communities), in interpreting their local situations and generating homegrown responses.

Likewise, educators with an eco-centric environmentalist bias design educational programmes that aim not only to empower people to manage the environment but also create more harmonious relations between society, nature and individuals within society. They also aim to re-orient society's modes and relations of production. The central role of those directly affected by particular sustainable development challenges is emphasised, not as passive recipients of 'expert' advice and directives but active analysts of their situations and co-creators of home-grown solutions to the challenges. In other words, EE is viewed as a social rather that a technical process.

At another level, society's development goals and the philosophies that inform them form an integral part of EE. This is because of the organic relationship between development practices and the environmental crisis/sustainability challenges which EE aims to address. For example, the twentieth century perception of development as economic growth, and modernisation as the right strategy for pursuing it, has led to unsustainable patterns of development and it is largely responsible for many of the environmental and development problems experienced in the world to day. Environmental Education should overtly challenge and address these concerns.

In order for EE to play its transformative role of re-orienting society and its systems, it is not only enough to critique modernism and its basic assumptions, but also to recognise all philosophies underlying actions geared towards the attainment of sustainable development as this will empower all stakeholders to pursue options that are sensitive to the socio-economic and ecological impacts of development processes well understanding each others' limitations.

¹ Habermas (1972), argues that there are three fundamental human interests; namely the technical, the practical and the critical or emancipatory, knowledge-constitutive interests that influence the different types of knowledge and educational processes.

Table 1: Educational orientations, characteristics and implications

Characteristics /assumption	Neo-classical/ Education	Liberal/ progressive Education	Critical/ emancipatory/transformative education
on: Education	Viewed as a technical activity, and an instrument/tool for achieving pre-determined behavioural goals; Preparing people to perform specific tasks; Teacher-centred, Neutral activity fully in the hands of the educator/technical expert to manipulate in order to change learners behaviour;	a social process preparing people for life rather than work (which is narrow) should be learner centred	 a social process empowering people to critique and transform oppressive socio-cultural, political and economic structures; political and ideological used to perpetuate dominant socio-economic and political relations levels power gradients in society, inextricably linked to the social, economic, cultural and political structure of society
Educators	- Viewed as experts in changing learners behaviours, - Designers of learning environments that elicit desired behaviour, - Knowledgeable authority transmitting knowledge	viewed as facilitators of the learning process organisers of learning opportunities enabling learners to take advantage of those opportunities	co-learners and co-constructors of knowledge in a situation of mutual respect in order to respond to challenges collectively and individually; collaborative agent
Learning objectives	- behavioural and predetermined by the expert educator	- co-constructed and outcomes collectively determined/deriv ed from community	- co-constructed based on material conditions of the people
Learners	lack the right knowledge skills and attitudes (must be taught by the expert – like an empty vessel to be filled)	- central to the educational process, - learners experiences are seen as the basis for learning, - Seed to nurture	 experienced co-constructors of knowledge and central actors in the learning process; critical, constructive co-participants -fire to kindle
Learning and change	 a linear process involving knowledge acquisition, attitude and behavioural change, (all depend on being equipped with knowledge) 	- social process in which all those concerned actively and willingly	 social transformative process; revolutionary aimed at levelling power gradients

		participate; depend on understanding social phenomena and being able to interact with it; expected to occur through reform based on people's understanding of the situation and informed decision making rather than technical	
Knowledge	 'True knowledge' helps to solve technical problems, and its creation is a responsibility of the expert educator/researcher through objective science pre-packaged learning experiences 	- knowledge is socially constructed in participatory manner,	 socially constructed and dependent on one's personal location should enable people to be critically aware and challenge the dominant oppressive power relations and structures in society
Teaching/learni ng Methods	- Transmittal/teacher centred - Social engineering	- bottom-up participatory - democratic and experiential - collaborative	 bottom-up, creating critical awareness; conscientisation through dialogue; critical enquiry
Educational failure	- associated with learners weakness	- associated with the exclusion of the majority of people from the planning and development of educational plans and strategies; - lack of ownership of educational programmes	 autocratic socio-political structures which lead to transmittal educational processes; disempowering methods and content

(Adapted from Kemmis et al 1983 and Janse van Rensburg 1995 and modified)

Some conceptual issues related to EE

EE as a concept has proved a little more complex than one often imagines. As mentioned in the foregoing discussion there are different orientations to education which are manifested in the different ways people have define EE. These differences also reflect the perspectives of different institutions on education and environment. What should be noted however is that a once-and-for-all definition of EE is difficult to describe and may perhaps not be that useful at all.

To many people, EE is a new idea. They ask, "What is EE?" Usually they want a universal definition. People often think that if something can be defined, then it is easy to understand and easy to implement. This view can be very simplistic as it is not always appropriate to reduce EE to a 'fixed thing' to be implemented. The broad nature of 'environment' and the inter-connected nature of environmental issues, environmental educators often find it difficult to draw a line between what counts as EE and what does not count as EE. This difficulty will always be with us, because of the complex nature of the crisis to which we are responding.

The IUCN, in 1971, defined environmental education as:

The process of recognising values and clarifying concepts in order to interrelatedness among man [sic], his culture and his biophysical surroundings. Environmental education also entails practice in decision making and self-formulation of a code of behaviour about issues concerning environmental quality.

The IUCN is a global scientific institution, which aims to offer internationally relevant, all encapsulating and clearly delineated solutions to the environmental crisis. The language used in this definition and other IUCN documents at the time; reflect rational, linear, developmental ways of thinking about environmental education reflecting the neo-classical education orientation. At the time this definition was described, environments and environmental problems were mainly associated with biophysical problems hence the conservation-oriented character of EE implied.

If one looks carefully at the language of the definition by IUCN it can be noticed they viewed the problem as a lack of knowledge, poor decision making skills and an inappropriate 'code' of behaviour among individuals. The proposed solution was to recognise the 'right' values, to practice decision-making and to change behaviour through (informal) rules i.e. follows the right code. Thus in attempting to choose one definition, applicable to all environmental education practices, the IUCN definition became abstracted and was not necessarily useful to a wide range of diverse environmental education processes, arising in many different situations of risk. Unfortunately, many educators uncritically continue using the same definition with all its limitations.

Nevertheless a number of environmental educators have also tried to interpret EE in a manner that is closer to reality. Lotz and Ward 1998 for example see the limitations of IUCN's definition as a result of particular orientation of those who formulated it, in particular their origins as natural and physical scientists who viewed environment from their perspective, leaving out socio-economic, political and ideological dimensions of the environment. Huckle (1991), Fien (1993), and Stevenson (1987) also agree with Lotz and Ward's contention when they argue that EE is more of a social process than a technical process. And as such, in addressing environmental problems, the solutions should be both the social and technical.

Looking at the EE courses offered Uganda's tertiary institutions; one clearly observes how the educators' professional and educational orientation influences their interpretation of environmental challenges and the solutions. The following section outlines the key aspects of EE courses offered in Makerere and Kyambogo University and attempts a critical analysis of programmes.

Courses offered by the two Universities

In the writing of this paper, I reviewed a number of courses offered by the different departments and faculties in Makerere University and one degree programme offered by Kyambogo University. In the case of Makerere University a number of courses are offered at different at the Bachelors, Masters and PhD levels. I specifically looked at the following courses in the different faculties:

Bachelor of Arts Environmental Management in faculty of Arts - Geography Department;

- Bachelor of Science in Forestry, Bachelor of community forestry and Bachelor of wood science and technology in the faculty of Forestry and Nature conservation;
- Master of science in forestry, master of science in Agro-forestry;
- Master of science in environment and natural resources offered by the Institute of environment and natural resources
- Master of Education Science Education by the Department of science and technical education;
- Bachelor of Adult and community education by the Institute of Adult and Community Education;

In the case of Kyambogo University, I took particular interest in the Bachelor of Environmental science, technology and management based in the faculty of science. The University has also recently launched another Bachelors' degree in Environmental Engineering.

The large number of courses deliberately developed to address environmental challenges demonstrates the tertiary institutions' commitment to and level of awareness of the environmental challenges and the need to address them. In both institutions a number of courses have tried to integrate environmental concerns in the curricula. Kyambogo University in particular the former polytechnic has gone a long way in integrating environmental issues in different disciplines. In Makerere University, courses like environmental law as taught as part of the LLB programme. In the Institute of adult and continuing education, EE is one of the core courses in the Bachelor of adult and Community education for third year students. In the faculties of forestry and agriculture almost all courses have a large component of EE although many times not labelled as such. In the department of Geography and MUIENR seminars have been conducted to specifically introduce the concept of EE. This notwithstanding, there are a number of challenges and constraints related to these programmes as I will shortly demonstrate.

Some challenges and constraints

The orientations of many EE programmes in the University are still deeply rooted in the natural and physical sciences. While this should not be problem in its self, the fact that socio-economic political and ideological dimensions of the environment are not given sufficient attention undermines the holistic view of the environment and environmental concerns which is very important if such concerns are to be effectively addressed.

I also observed that while the central goal of EE is to change behaviour, values and actions teaching approach is often the traditional transmittal mode in form of lectures and written assignments. Even where practical activities are provided for they are conduct in the traditional neo-classical model in which theory is separated form practice.

In terms of content, I observed that in almost all the programme the main concern of the lecturers is to provide information but not to challenge learners to think and act critically as empowered scholars able to take action and control of their destiny. The tendency to tech for examination overwhelms to need to create empowered scholars. The same applies to the learners themselves. Their main focus is on achieving good grades and the measure for that is the written exam.

Whilst what is required in a context like ours in the creation of a critical mass of scholars and environmental practitioners to challenge the dominant socio-economic and political paradigms informing the current environmentally destructive practices, the programmes are largely silent on these, choosing only to give information without the tools to critique the status quo.

The above challenge raises an important question as to whether educators in tertiary institutions have been sufficiently oriented in the appropriate learning methods and approaches to undertake roles as educators.

The extent to which staff within and between tertiary institutions share professional information and support each other is also put to question. I encountered situations where access to information on courses was made extremely difficult all in the name of protecting courses from being pirated. This is indeed disappointing given the fact that all are working towards the same goals of sustainable development.

Some recommendations

Given the nature of constraints mentioned above, I would like to make three major recommendations at the level of course design, methodology and re-orientation of University staff.

- a) While it is true that a lot of effort has been invested in the development of the current courses, the fact that some glaring gaps still exist, I would like to recommend that in future interdisciplinary teams are involved in the design of such courses. In the same vein it would be useful to establish forums for the different EE professionals to meet share experiences and establish mechanisms for supporting each other.
- b) Because EE is fundamentally meant to transform people's ways not only of thinking but also of doing things, participatory learning and teaching methods that empower learners and educators at the same time are adopted;
- c) For the above to be achieved there is an urgent need to organise programmes to re-orient educators in tertiary institutions towards transformative teaching and learning for sustainability.

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NEMA'S Public Awareness Program

Elizabeth Gowa, IEC Officer, NEMA bgowa@nemaug.org

Today's situation

Environmental degradation – how did we get there?



Legal framework

- Article 245 of the Constitution of the Republic of Uganda authorizes parliament to provide for measures intended to promote environmental awareness.
- National Environment Act Cap 153 Article 87 (e) mandates NEMA to carry out public awareness activities.

Guiding principles

- Vision: A sustainable environment for quality life in Uganda
- Mission: To promote public awareness and action for sustainable use and management of the environment
- Goals:
- Promote the development of adequate environmental knowledge, skills and awareness in Uganda
- Developing and supporting the implementation of multi-media environment awareness strategies and activities at national, local governments and community levels
- Assisting local governments to develop and implement environment awareness programs and activities
- Assisting local governments to establish awareness and communication systems including resource centres, for effective information dissemination

Strategies

- National strategy
- Local governments strategy

Objectives at national level

- Influence policy-making and implementing organs to enhance public awareness.
- Strengthen the capacity of public awareness partners to enable them fulfill their role.
- Target the widest section of the population in the campaign.
- Strengthen networking and coordination in NEMA.

Objectives at Local Government level

- Build capacity and strengthen collaboration and coordination of environment management awareness activities of the district and sub-county technical planning committees.
- Influence policy-making organs in the districts, sub-counties and parishes to enhance environment management public awareness activities in the districts.
- Work with mass media organizations/journalists to reach a wide section of the public on environment management awareness/education issues in the districts, sub-counties and parishes.
- Strengthen capacity of NGOs/CBOs involved in environment management awareness/education campaigns in the districts.
- Strengthen the capacity of sub-county, parish and village councilors both in initiating policies and conducting activities to promote environmental management awareness in the districts.
- Support schools and other institutions of learning in the district in their environment management education work as well as to create and maintain living examples of good practice on their compounds.
- Strengthen environment management awareness and the translation of the same into action in the district through demonstrations, exhibitions, training, shows and community meetings to various target groups.
- Create a culture of monitoring and evaluating environment management awareness activities in the districts and using the information for reporting and improving environment management awareness activities in the districts.

Implementation approach

- Campaign based on a multi-media approach
- Print
- Electronic
- Resource centres
- Inter-personal interventions
- Messaging/content by audience
- Target consumer demographics

Channels of implementation

- Print media
- Materials production
- Radio
- Television
- Internet
- Training videos
- Public relations
- Resource centre

Audience targeted

- Policy makers
- Resource users
- Urban population
- Rural population
- Industry
- Children

Print media & materials

- Readership ~35,000-40,000 each, for Monitor and New Vision
- The East African for regional coverage
- Limited coverage in country
- Activities:
- Quarterly newspaper supplements on different subject areas
- Fact sheets, brochures, posters, newsletter

Radio

- Caters for language diversity
- Expensive
- Need to use many to achieve national coverage

Activities

- Spot messages
- Radio dramas/skits
- Discussion programs

Internet

- World wide access
- Access in Uganda limited but growing

Activities: Web site: www.nemaug.org

Television

- 80% coverage country-wide (UTV)
- English is the main language of communication.
- It is expensive and also not everybody can afford television, so it doesn't reach everyone
- Draws on resource people from partner agencies

Activities

- Bi-monthly TV "actuality" discussion programs
- Bi-monthly 30-min documentary program

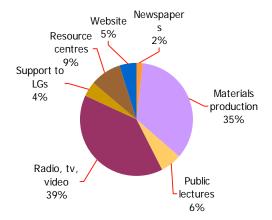
Training videos

- Varied subject areas
- Language and context specific
- Adaptable to different audiences
- Shows the physical realities on the ground

Resource centres

- Reference only
- Books, videos, CD-ROMs, Internet access, pictures, on varied subjects
- National and international publishers
- Limited reading space
- Audio-visual facilities

Budget distribution



Partners

- NEMA staff
- District officials
- Lead agencies
- The media
- NGOs
- Schools & institutions of learning

Challenges and lessons

- Poverty/low appreciation of environment
- Lesson: influence decision makers, integration into existing programs to attract \$ from different sectors
- Political interference
- Lesson: Need to exert sufficient focus on leadership
- Literacy levels
- Lesson: Need for a multimedia approach
- Complexity of the subject
- Lesson: Step by step educative approach, flexible enough to pick up on 'news' issues so as to remain relevant & interesting to audience
- Financial resources
- Lesson: combine awareness with action-oriented programs
- Capacity at local government level
- Lesson: capacity building, partnerships, using NEMA programs
- Expense
- Lesson: partnership, integration, documentation of best practices
- Monitoring and evaluation
- Lesson: Need for a strategy to show general direction, media monitors, performance indicators
- The way forward
- Everyone has a role to play
- Continue to carry out awareness
- Integrate environment awareness into all sector programs
- Partnership
- Regular networking to share experiences
- Never give up; environmental education is a lifelong process.

Working with Schools; a Case Study of GUCI, Iganga

Akwi Okwi, Kigandaalo Kigandaalo Primary School Akwi_okwi@hotmail.com

BACK GROUND:

Education is considered critical in achieving sustainable development. E.E helps people develop positive attitudes and sense of personal responsibility for the environment.

- GUCI (Greening Buliigo Community Initiative) is one of the avenues for community action in attempts to improve the condition of the environment.
- GUCI was specifically formed to address the transfer of information and practices from school to the households in the neighbour hood.



PURPOSE:

To build a capacity of well established youth with diverse experiences and expertise in addressing an environmentally friendly healthier and productive neighbourhood.

OBJECTIVES:

- Promote awareness and commitment to make a healthy community.
- Mobilise school and community based training to improve the state of environment.
- Educate the community on the Rs of solid waste management encouraging the practice of reducing, Re-using, Refusing and Recycling.
- Involve school departments in presenting debates Music & Drama to increase awareness.

MAIN ACTIVITIES:

NEMA 1996 put in place a national strategy for Environmental Education for Formal Education Sector. This made Environmental Education mandatory in all formal Education Institutions.

FEE (Formal Environmental Education) focuses of seven programme areas:

- 1. Development of a curriculum that integrates environmental education into the school curriculum.
- 2. Development of Environmental Education Management Materials:
- 3. School community links:
- 4. Research:
- 5. Environmental Education projects:
- 6. In service teacher training:
- 7. Net working and co-ordination:

In this context GUCI advocates for the "WHOLE SCHOOL APPROACH where by pupils, teachers, non-teaching staff and members of Local Community are all involved in activities that will affect the environment in a positive way- it encourages rewards, and a credits those schools, and individuals that take positive environmental actions and learning.

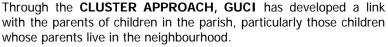
GUCI is developing a "CLUSTER APPROACH" to Environmental Education, where **GUCI** and schools around work together at the community level. It's helping schools to in incorporate **EE** in the practical teaching programmes. This is more effective in the areas of developing experimental gardens, at school where the community comes for study during their visits to school.

Music, Dance and Drama has proved the most effective and efficient means of involving every one in positive environmental actions and learning.

GUCI is trying to emulate Eco- schools programme, an international programme of **FEE** with member organisations in 28 countries in Europe and several other countries in the Caribbean.

ECO- schools is a programme aimed at making sustainable development a part of the life of a school. GUCI has designed its programmes to fit into the curriculum. It aims at raising pupils and community awareness of environmental and related sustainable development issues.

HOW IT WORKS: COMMUNITY SCHOOL LINKS:



And idea to visit homes, identify environmental problems and solve them was proposed. The parents who are positive confirm their participation with the patrons of the children's environmental clubs.

GUCI in a 'Keep Iganga clean' campaign and in a home visit (Next).

These linkages were established in April 2003 when the home – to – home visits began. Children are divided into groups headed by teachers together with a representative from the Environmental Education Committee visit a home every Wednesday from 4-5p.m. They identify an environmental problem, then take action for example collect rubbish, dig channels to divert water or fill pot holes.

ENVIRONMENTAL EDUCATION PROJECTS

GUCI is the voice of the community for the members are from the community and are supported by it. The cluster schools have taken on Music, Drama poetry projects to increase pupil and community awareness.

The schools have composed music & drama on the themes of water is life. These songs are presented during the local council meetings and open or parent days in the cluster schools far the cluster schools include:

Royal Secondary Schools Buliigo North Village.
 Buliigo North Village

Buliigo Boarding & Day P/SSt. Agnes Primary School
Buliigo North Village
Kasokoso South Village.

SOLID WASTE MANAGEMENT PROJECT:

The cluster schools have tried to make learning in lower primary (P.1-P.2) more exciting. They specialised in the recycling of polythene bags (Buvera) and paper which they get from the school and from the neighbouring homes. Paper is mashed and used to make learning materials, while the polythene is used to make ropes and balls. Jute sacks and old rubber slippers are cut into numbers and letters of the alphabet.

RESEARCH PROJECTS IN A PARTNERSHIP:

GUCI recognises that children should be



empowered in decision making and public participation.

In collaboration with the water department, public Health and sanitation Department the children conducted an investigation of the Walugogo wet land in the neighbourhood.

This builds their competence in monitoring the pollutant types, qualities and their impact on human health and the wetland bio-diversity.

In partnership with Iganga Town Council, GUCI together with other schools have been able to establish a children's park. This was done as a restoration project. It has strengthened **GUCI's** school community link: for the cluster approach is extending to other schools beyond the village.

Model school, model village and model home approach has motivated the neighbouring village and schools to begin taking informed actions about their environments.

These have enabled children to be more knowledgeable about issues in their local neighbourhoods and confident that they can make a difference by working together and in partnership with the Local Communities.

CHALLENGES

- Maintaining children's interests in EE conservation programmes.
- Development of **EE** management materials requires skill and is expensive.
- Motivating the community to participate and support clean up campaigns is changeling.
- Motivating the school and local community leaders to plan and budget for the environmental education programmes in schools.
- Maintaining cluster team spirit.
- Co-ordination between activities of different **NGO's**. Most operate in more or less in isolation leading to inefficiencies and over lay in their work.
- Continuity of activities.

LESSONS

- Through net-working and school community co-operation sharing of relevant technical skills can be maximised.
- Economic status of communities' can be improved through the initiated soil and water conservation, and waste management projects.
- More ideas on use of school grounds as a teaching learning resource enhances environmental action learning in school.
- Community learning especially in conversion of waste into local economic benefit for example diversion of water to Banana gardens.
- School environment is learning site.
- Sharing of knowledge as children's visited homes and worked as clubs.
- Active engagement of pupils, women and youth encouraged critical thinking.
- Culture of the school and the neighbourhood changed positively.
- School acted as a catalyst for community development.
- Pupils can be empowered to identify environmental problems, site solutions and work with the households to solve them.
- Through pupils actions they learn barriers, which are related to solving an environmental problem.
- Schools can open up to their communities and become active in finding solutions to create a sustainable future.
- Educators can learn to use existing development and tendencies to forward a cause.

The Role of the Media in Awareness Creation

Peter Wamboga Mugirya Farmer's Voice/ EJAU P .O. Box 12141 Kampala, Uganda Tel: 256-71-319245 pwamboga@yahoo.co.uk

Media History on Environment

- The pre-independence and post-independence media did not have issues of environment strongly on their agenda
- The oldest newspaper, Munno was established in 1911, the first state-owned media, Radio Uganda set-up in 1954 and later UTV were owned by the colonial administration before in 1962, and dwelt on Politics and Economy.
- UTV/ Radio Uganda Educational Broadcasting Division regularly, as policy, aired programs
 educating the masses on agriculture and forestry and came closest to dealing with the
 environment.
- Because global Environmental agenda only emerged mainly in late 80s and early 90s. And Uganda
 was no exception. It's only in 1986 that the then new NRM Government initiated environmental
 matters on its agenda.
- Creation of the Ministry for Environmental Protection, and the birth of National Environment Action
 Plan (NEAP) process propelled the Media into Environment coverage

The New Media - Environment Coverage

- Emergence of the dreaded water hyacinth.
- Abuse of nature
- Environmental Awards
- More Journalists and the Birth of EJAU
- Birth of Makerere University Institute of Environment, the Mass Communication Department and EJAU accelerated training Environment Journalists.
- Public Dialogues by EJAU and PANOS Institute
- Regional Network on Lake Victoria by IUCN, EJAU, HEMNET, and JET
- Emergence of NEMA sponsorship of Environment coverage; Monitor fm and UTV. CBS by Environmental Alert. And MAMA fm Etc.

Role of the media

1. Creation of awareness.

The media provides information on the state of environment.
 Reporting on the good and bad practices: Environmental journalists acting as watchdogs for the environment.

Highlighting the availability of funding opportunities.

 Reporting about activities of government agencies, NGOs and CBOs.



2. Advocacy

The media relies on the agenda setting concept. It does not have the power to tell the people what to think, but tells them what to think about. Consequently, the public demand for accountability and transparency.



Why do we have few stories about Environment in the media?

- The lasswell's communication model
- Who says what? Opinion leaders are likely to get more attention-President and others.
- What does he say? If what is said affects many people this makes news.
- In what channel? Different channels reach different audiences. (What is your audience)

The News value paradigm

- The Conflict-dramatic events such as clashes on Butamira forest reserve.
- Contradiction. The government officials who are supposed to implement government policy going against the policy.
- Controversy
- Colorful language- This is helps to package information.

New Partnership with the Media in Environmental Information

- Private sector participation. UTL, Celtel, and MTN
- Civil society-Media collaboration
- Improvement in Information Technology
- International support to the Ugandan media on Environment. WB, IUCN, UNDP, SIDA and UNEP Etc.

Challenges

- The Media is commercialised and because of this advertisement takes space for news.
- Corruption in cases where media managers and reporters are influenced to kill stories.
- Environmental stories are expensive. But reporters are not facilitated.
- The environmental reporters are not trained. Environmental emergencies may be deemed as newsworthy





- Training opportunities at Makerere University-Mass Communication department-PGD Environmental Communication and 2 weeks cert. courses.
- Existing networks including EJAU, Commission on Education and Communication of IUCN, African Network for Environmental Journalists under UNEP, Network for Environmental Journalists on Lake Victoria..
- Environmental Communication experts are being recognised, For instance, the late Ndyakira Amoti, CNN Awards, Environmental Alert etc.

Farmer's Voice reports on environmental issues affecting farmers

- Creation of environmental institutions such as NEMA, reforms in forestry and legislation on environment.
- Uganda has 120 registered fm Stations, Over 60 operating, 4 TV Stations, and about 10 Newspapers and Magazines. E.g. Farmers Voice has 2 Environmental pages. Etc.

What can EJAU do?

- Mobilise journalists to report on the different activities of the lake and river Nile. It can organise
 excursions.
- Public debates on the various aspects of environment.
- Organise training for media houses and exchange visits with various riparian countries.
- Influencing through lobbying media houses to cover issues on trans-boundary resources. Organise TV and Radio talk shows.



- Participate in designing a media communication strategy on the Nile.
- EJAU & NTEAP should set up a mobile film unit for rural Environmental awareness on the Nile.
- Mobilise Communities living along the Nile in carrying out Environmental conservation programmes.
- Develop a Radio Station whose sole purpose is to Educate and entertain the users of the Nile resources.
- EJAU in partnership with NTEAP will establish a regional Network of Journalists in the 10 NBI States
- EJAU is due to start Public Dialogues on the state of the Nile.

Annex 11 Workshop pictorial









Annex III List of Participants

Name	Address	Name	Address
Dr. Aryamanya Mugisha	The Executive Director	Mr. Allele George	Department of Information,
, , ,	NEMA		UTV,
	P. O. Box 22255,		P.O. Box 40188,
	Kampala, Uganda		Kampala
	haryamanya@nemaug.org		' '
Ms. Alexandra Karekaho	ARR, UNDP	Mr. Simon Peter Amunau	Nat. Res. Coordinator,
	P.O. Box 7184,		Straight Talk Foundation
	Kampala, Uganda		P.O. Box 22366
	Alexandra.karekaho@undp.org		P. O. Box 7002,
			Kampala
			spamunau@yahoo.com, strtalk@imul.com
Mr. Maushe Kidundo	EE &A lead Specialist NBI-NTEAP	Ms. Proscovia Mulyowa	NCDC
	P.O.Box 2891, Khartoum		P. O. Box 7002,
	mauschek@unopsmail.org		Kampala
			mulallen@hotmail.com
Mr. Robert Nabanyumya	National Project Coordinator, NTEAP	Mr. Francis Wilkins Aduka	Environment Alert
	P.O.Box 22255,		fwily2k@yahoo.com,
	Kampala		youngprofessionals@envalert.org
	robertn@nileteap.org		
Teddy Tindamanyire	Ministry of Water, Lands& Environment	Mr. Thomas Otim	Uganda Wildlife Education Center
	Wetlands Inspection Division,		P.O. Box 369,
	P.O. Box 9269,		Entebbe
	Kampala, Uganda		uwecd@uwec200.org
	tindamanyiremtt@yahoo.co.uk		-
Mr. Akol Charles Michael	D/DSCPE, NEMA	Mr. Sam Mabikke	Conservation Trust
	cakol@nemaug.org		P.O. Box 1665,
			Kampala
			Tel: 256-77-510027 Fax: 256-41-252843
			mabikkes@yahoo.com
Ms. Beatrice Adimola	EEC, NEMA	Mr. David Mugabi	Executive Secretary, LAKIMO
	badimola@nemaug.org	_	P. O. Box 373,
			Soroti
			Tel: 256-45-61373 Fax: 045 61372
			lakimo@infocom.com , david_mugabi@yahoo.com
Dr. Dan Babikwa	Makerere University,	Ms. Firmina Acuba	Directorate of Water Development
	I. A. C. E.		P. O. Box 20026,
	P.O. Box 7062,		Kampala
	Kampala, Uganda		Social-scientist@dwd.co.ug
	danbab@iace.mak.ac.ug		
Mr. Ocaya D. Michael	P. O. Box 25,	Ms. Vastina Beyendera	Inspector of Schools,
	Packwach, Uganda		P.O. Box 5, Kabale

Ms. Immaculate Kijagulwe	Urban Environment Uganda P. O. Box 6202, Kampala, Uganda ikijags@yahoo.co.uk	Ms. Elizabeth Gowa	IEC Officer, NEMA bgowa@nemaug.org
Mr. Wilfred Baanabakintu	PRO, NEMA wbaanabakintu@nemaug.org	Mr. Albert Mukundane	Trade development & commercial officer Kampala City Council, Makindye Division mukundanebalbert@yahoo.com
Mr. J.B Mutalya	Chairman, Jinja District Wildlife Association, P.O.Box 1265, Jinja . Tel: 256-77-627066 mutalyajb@yahoo.com	Mr. Tom Waako	NBI Secretariat P.O. Box 192, Entebbe twaako@nilebasin.org
Mr. Gerald Tenywa	The New Vision P.O. Box 9815, Kampala gtenywa@newvision.co.ug gmagumba@yahoo.com	Ms. Lillian Idrakua	WRMD, DWD, P.O. Box 19, Entebbe Idrakua.wrmd@dwd.co.ug
Mr. Peter Waboga Mugirya	Farmer's Voice/ EJAU P.O. Box 12141 Kampala, Uganda Tel: 256-71-319245 pwamboga@yahoo.co.uk	Mr. Hamidu Kizito	Rural Development Media communication (RUDMEC) P. O. Box 1727, Kampala, Uganda Kizito_h@yahoo.com
Ms. Yawe Agnes	Environmental Alert P. O. Box 11259, Kampala, Uganda ayawe@envalert.org	Mr. Ernest Nabihamba	Municipal Environment Officer P.O. Box 720, Jinja Enabi65@yahoo.co.uk
Mr. Pathias Karekona	Tel: 077 411245 pathiask@yahoo.com	Ms. Akwi Okwi	Kigandaalo Primary School Akwi_okwi@hotmail.com
Ms. Elizabeth Mutayanjulwa	EE Materials Production, NEMA emutayanjulwa@nemaug.org, e_mutayanjulwa@yahoo.com	Ms. Ida Ameda	P.O. Box 4944, Kampala, Uganda iameda@yahoo.co.uk