

# Environment & Natural Resources as a core asset for Wealth Creation, Poverty Reduction & Sustainable Development Draft Workshop Report

2007



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## **LIST OF ABBREVIATIONS**

APSA	African Peace and Security Agenda
ASAL	Arid and Semi-arid Lands
AU	African Union
CAR	Central African Republic
CEWARN	Conflict Early Warning and Response Network
CSR	Corporate Social Responsibility
EAC	East African Community
ENR	Environment and Natural Resources
ESR	Environmental Social Responsibility
EU	European Union
GDP	Gross Domestic Product
GMOs	Genetically Modified Organisms
GNI	Gross National Income
IGAD	Inter-Governmental Authority on Development
IT	Information Technology
IUCN	The World Conservation Union
MDGs	Millennium Development Goals
NEPAD	New Economic Partnership for African Development
NR	Natural Resources
NRM	Natural Resource Management
OAU	Organization of African Union
ODA	Overseas Development Aid
PRISM	Poverty Reduction through irrigation and small scale markets
PRSPs	Poverty Reduction Strategy Papers
SADCC	Southern African Development Community
SDI	Sustainable Development Index
SEA	Strategic Environment Assessments





infrastructure; and improvement of the physical infrastructure (Roads, power, telecom, etc). The specific and immediate actions at the sub-regional level were given as follows: market information System; market integration; and regional trade



# CHAPTER

## 1.0 INTRODUCTION

### 1.0 Background

Today more than ever there is an increasing need for the region to address the issue of environment and natural resources. Over 80% of the region is dry and the land is mainly





- In Ethiopia loss of wood means animal and crop waste used as fuel which further exacerbates soil fertility loss (est. to result of lost yield of 500,000 tons per annum of grain)
- 80-90 % of domestic energy needs (wood fuel; cow dung...);
- Pharmacopoeia for the majority of urban and most of rural communities;
- Fruits and nuts for shepherds, etc;
- Wildlife and fruits and nuts for hunter gatherers;
- Fishermen and fuel wood collectors;
- Water vendors; etc.
- Increasing population and land use pressures – linkages (or not) with improved land use
- Soil erosion (many reasons) and loss of soil fertility exacerbate land use pressures
- Large numbers of (esp.) rural people are vulnerable (food security) – ex 55% in Ethiopia

### **MDGs**

1. Eradication of extreme poverty and hunger;
2. Achieving Universal Primary Education;
3. Promoting Gender equality and Women empowerment;
4. Reducing child mortality;
5. Improving maternal health;
6. Combating HIV/AIDS, tuberculosis, malaria and other diseases
7. Ensuring environmental sustainability; and
8. Developing global partnership for development.

### **The Hidden/Invisible Value**

- Hidden to most of us (especially in formal sense), but hugely important for rural people to meet needs, meet contingencies, cope with risk
- Wild foods and fruits, medicinals, and other products
- Not part of reporting, so not recognized
- Increased opportunities for natural product value adding (theme 4)
- Value of Doum palm use (Nakfa 17.8 per person per day) in West Eritrea worth more than other forms of land use. 40 to 60% of house holds dependent on NRs for 15 to 30% of their total income

Investing in the Environment supports attainment of all MDGs, it's not just MDG 7, for ex: Sustainable use of natural resources:

- Income flows (esp. 1, but all MDGs)
- Saves time in collecting fuel (3, 2)
- Medicinals and foods (1, 2, 5, 6)
- Catchment improvement – water (2, 5, 1, 7)
- Energy (fuel wood)
- Risk management

### **Livelihood Improvement & environmental management**

**No silver bullet** - Need to:

- create economic opportunity
- reduce vulnerability & insecurity
- support participation in decision-making

- strengthen capacity to seize opportunities
- Environmental management can contribute across all dimensions

**Proven strategies:**

- improve access to information & public services
- reduce constraints on sustainable resource use (e.g. licensing, credit, tenure)
- improve governance & the rule of law, including decentralized NR management
- promote participation of women & other marginalized groups in decision-making
- address local priorities, e.g. water pollution, restoration of critical natural resources
- promote sustainable use rather than preservation (e.g. essential oils, eco-tourism)

**Some Key Questions to Ask**

- What combination of land use can better promote and improve livelihoods **AND** the Environment? How can this be done?
- There is an uneasy tension between Environmental management, agriculture, land management & population pressures – how can the trade-offs best be managed
- What are some of the major risk & vulnerability issues which need to be addressed? And how can this be achieved in terms of livelihood improvement and sustainable environmental management

**Example of an approach**

Management of a mountain range, the Choke Mountain Range-Abay (Blue Nile Watershed);

- 3600- and above-mountain reserve Biosphere;
- 2800- 3600 Forest-plantation fast growing trees-Carbon sinking-bee keeping combined;
- 2800- and below staple crops and high value crops for the market;
-

a new alternative that should be looked into with great detail. We should also get together and identify non-timber sources of livelihood.

### 2.1.3 Responses

It is important to use energy savings stops. Emphasis should also be put on effective

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- Land Administration inextricably linked to both administrative & social issue

**Terms of rights whose are the NRs anyway??**

- Tension between state & people (reserved forest & PA estate) leading to... (NWA approx \$0.75 mill p.a.), & various forms of collaborative management
- Decentralized NR management (forests, fisheries, range) – do “exp... people to be able to? – or is such decentralization... management... permits?
- Real definition (rights/responsibilities) of NRs – part of the social... improving... & livelihoods – not the continuing problem of conservation
- In Kenya... of sacred groves with little or no formal protection... managed &... unique biodiversity & other products

**Gender & Equity of**

- Rights in land... making
- Access to... awareness
- Balance &... of roles
- Environmental management increases pressure on women (fuel, water, especially...)
- fuel...

poor

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- Are the users of the land part of the decision making with respect to use? How?

### 2.3.3 Responses

The answers to the issues raised were discussed during the group discussions.

## 2.4 Theme 4: Economics & National Accounting

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### 2.4.1 Presentation

Our challenge: By not investing in sustainable environmental management, we undermine the very development & livelihood security & improvement we so desperately seek

- Climate change a stark example of that – Sudan – worst floods in living memory affect 400,000; Uganda – heavy rains affect 300,000 (together with other countries in Africa – mean that 4.6 million affected – what is economic cost (never mind huge social cost)? & now how will we cope & still improve our lives?
- Econ growth *will depend* on how well we manage our environmental assets

#### Some Figures

- 1997 – 2000 El Nino – La Nina years cost Kenya approx \$3.7 billion or over 17% of GDP for that period
- Nakivubo Swamp (Uganda): Land reclamation reduces swamp wastewater treatment functions – costing \$2 million a year
- Tana River (Kenya): Dams alter hydrology, impacts downstream ecosystems & economies - \$27 million estimated costs
- Cost of Natural Resources degradation in Uganda approx 17% of gross national income p.a. (6% due to forests, & 11 Tc 0.550m 47.\$ Tw (degr-TD 0 T51c 0 Tw (-) Tj 6 0 TD

**So**

- Does environmental sector talk with economic sense – or only as environmentalists?
- Does Economic planning sector talk with environmental sense – or only as economists?
- What about political sector – what voice do they talk with?

**Our fixation with GDP!**

- Reality is that most of GDP still natural resource based (agric, forests, tourism, water etc.), But GDP appropriate for environment? as
- It does not really take into account depletion & degradation of natural resources (except when crop yields go down)
- Tends to focus on goods, not “bads”
- ANS (Adjusted national

- Annual direct productive value of wetlands \$300 to \$600 per HH p.a.

### **Evolving role of Private Sector**

- Growing CSR, & ESR – & it's not just PR – but a means to improve income
- Promoting fair & sustainable (certification – fair, organic) trade
- How to support private sector initiatives – esp. those that work with rural people

### **Case is clear**

- Increasing amount of facts & figures
- Can no longer ignore (ex. of climate change)
- But how to ensure responsible investment – as it is political as much as technical
- Need for accountable indicators (& means to measure) in all sectors & in PRSP type instruments (get beyond rhetoric of mainstreaming to accountability)

### **Some Question Areas**

- How are natural resources reflected in national accounting, & other measures of national growth? How can this be improved?
- Does country have indicators (& means to measure) that reflect value of environment & natural resources in PRSPs & performance of all MDGs? – What about next generation PRSPs??
- To what extent are natural resource assets reflected in national & regional marketing & trade? How can this be improved?
- Is Strategic Environment Assessments (SEA) used in a practical & functional manner so that different sectors (& programmes) responsibly integrate environmental aspects of direct relevance to sector?
- What is true economic importance of ENR to GDP how significant are these for HHs & livelihoods – esp. poor?
- What criteria should Gov put in place to guide future decisions to inform scale at

states in addition to this we also need to be careful and sensitive when implementing this system

**Uganda:** The issues raised by the delegates were as follows: Most of the environmental issues are in the informal sector and experts therefore need to advise planners and economists on how best to incorporate these issues into their measurements of economic indicators etc.; currently Uganda has in place a Sustainable Development Index (SDI) which they use in environmental accounting. This should be looked at by the consultants as a case study for duplication in the region; the role women play in the conservation of the environment and natural resources is important and should therefore be addressed and looked into for further exploitation. Women need to be involved and used in the management of natural resources and afforestation.

**Sudan:** The comments, suggestions and questions raised by the delegates were as follows: it is important that we integrate Natural Resource planning into our economies; the role the environment plays in any economy is important but is rarely given the importance it deserves. Fossil fuels are just as important as any other sources of fuel and they should not be completely ignored as we discuss alternative sources of fuel; there is a need for organizations such as the IUCN and IGAD to help partner states such as Sudan build capacity to be able to integrate environment and Natural resources into planning; and we should be at the very forefront of the change we want to see and be the change we want to happen for us to make any headway in the implementation of all the discussion we have had and the policies we wish to make.

**Kenya:** The comments, suggestions and questions raised by the delegates were as follows: the problem or the issues in environment are broad and many; there is therefore a need for development of a policy that covers all elements of environment. Once this policy is developed it would also be prudent to submit a protocol (Framework for implementation) which would be legally binding to partner states; the approach to policy generation needs to be holistic as regards the IGAD region and the formulation should also consider an approach that is region wide in nature and relevance; existing institutions that deal with the environment should approach the ministry of planning and finance and work with them to form productive synergies that would be of benefit to the environment and all natural resources. There is a need to conduct sensitization of environmental and natural resource issues to the public at large. In relation to this we need facts and figures that will accompany us in making a case for the environment; we need to appreciate that there is currently someone or some people footing the environmental bill i.e. the cost of management of the NR and the Environment, so how are the regional governments and other organizations working to help this people. Do they have adequate support; we need to attach some value to the resources available to us (figures that quantify the value of resources available to us in the IGAD Region) this valuation needs to be carried out per area/sector/ region/ country etc to ensure that no areas and or places are left out; and there is a need for us to appreciate land use in order for us to account for the different agro-ecological regions. We therefore need to look at the market value of the NR and the products derived from them and the willingness from consumers or would-be consumers to pay for these resources. We should also look at the geographical distribution of resources in order for us to properly account for these resources and utilise them sensibly. We also need to look at environmental degradation country wide and region wide in order for us to intervene in a prudent manner. Conservation and interventions though they be well meaning have sometimes had biased attention accorded to them e.g. the project that seeks to fence off the Aberdares mountains it being the source of water for all of Nairobi though well meaning was not as urgent as the need to address landslides in some parts of

the country caused by siltation, erosion etc. there is also need for lobbying campaigning, engagements, etc. only then can the issue of environment get its right full place in our region.

## **2.5 Theme 5: Emerging Issues**

largely as falling within the bio-physical, technical realm that related to the apolitical sphere of “development” as defined traditionally, to the sphere of top priority - Security. Prior to this decision there had been efforts, including the promulgation of laws and policies, seeking to address various aspects of Africa’s resources. However, these were piece meal and resource specific. By locating the issue of Africa’s resources within the peace and security agenda, African leaders had not only acknowledged the centrality of these resources to the continent’s agenda for renewal and regeneration, but also their



- conflicts as in Darfur. If the region continues to experience extreme droughts and famines then we are likely to see increased conflicts as pastoralists move southwards in search of grazing areas deeper into areas that were previously seen as agricultural zones.
- b) Impact of climate change on human and state capacities. A situation of floods can lead to a threat of spread of conditions favorable for vector-borne diseases such as malaria. For instance, estimates indicate that an increase in the temperatures of up to 2 degrees Fahrenheit can trigger a malaria epidemic in Kenya; the recent floods in Uganda and Western Kenya could have the potential of triggering a health emergency – because excessive flooding can lead to poor sanitation and trigger diseases such as cholera. Any health emergency involving large numbers of casualties and probably death can quickly expand into a major regional or global security crisis (avian

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Today, the Gulf of Guinea is written into the USA security strategy as an area of interest, so is the East African Indian coast where IGAD countries lie. In addition to governmental security strategy, multinational corporation from Brazil, Canada, China, India, Japan, South Korea, the USA and several other developing countries have either secured or are exploring various opportunities for such cooperation. An interesting aspect of these engagements is the symbiotic relationship between the private sector and the strategic objectives of governments in pursuit of national interests. This multitude of interests creates an environment of intense competition and predatory behavior, with serious implications for peace, security, stability and sustainable development in IGAD Member States, individually and collectively.

**Implications:**

- a) Most of the projected growth in consumption of natural resources is expected to come from developing countries, especially china and India. This introduces new dynamics into an already highly competitive sector, pitting the various interest groups in a still battle to gain influence, access, effective control and the right to benefit from exploitation of resources, including at community level. Managing this intricate web of interests effectively and in a manner that will benefit local populations remains the single biggest challenge for IGAD member states individually and collectively, at least from a strategic perspective.
- b) Despite constitutional provisions stipulating that ownership of natural resources is vested in the state on behalf of the people, de facto ownership is largely exercised by foreign entities whose interests do not always coincide with those of the state and/or its people. Africa countries rely heavily on external resources for capital as well as technical and technological know-how in activities ranging from exploration, extraction and processing, to marketing and sales. This overdependence renders Africa states vulnerable to external pressures and has the potential to undermine the state's ability to exercise its sovereign right over natural resources. It can also seriously compromise the state's ability to exploit and manage natural resources in a manner that enhances human25.68 -134compnconwly comproD (serstmann5lhcmr iow) TD /F

subterranean wealth deposits. What minerals are in the subterranean surfaces of the IGA region? How many of these countries have deposits. Where we know of the wealth, how much fossil fuels does Sudan, or even Somalia have? In Angola – questioning some of the companies undertaking offshore drilling. Concessions are granted on terms determined by outsiders.

- b) Development of a technological base to help explore, exploit and increase the value of resources (process of beneficiation);
- c) Accountability and ensuring that the exploitation and management of natural resources enhances peace, security, stability and sustainable development domestically, at present and the future generations. Key to this, are processes for determining concessions for exploration and exploitations – including taxation regimes etc. In addition is the capacity to bargain favorable terms of investment, in line with countries and regions security and development interests.
- d) Having an empowered population to control and manage access and exploitation of resources. In most cases, resources are control by governments, their agents or external investors, and in most cases, the populations sitting on these resources do not benefit.
- e) Capacity to guarantee security across all territory and to all populations/citizens in a country. Increasingly governments are losing control of resource rich regions leaving them under the control of negative and militia forces – that sometimes use such resources to wage war or to terrorize populations (mungiki and the transport industry

- c) The key challenge is to build effective operational capability and forging value adding partnerships at various levels. At the national level, there is need to build inter-departmental relationship to ensure synergy and coherence. One way of ensuring this is deploying a cluster approach to enable the relevant structures of the government to work in cohort. However, partnerships need to go beyond the government and specifically to research institutions in order to generate field-based information and sound analysis as a basis for guiding governmental policies, strategies, action and implementation options. It is also critical to work with the NGO sector particularly in mobilising political will

- For contributing to the continental process towards minimum standards for the governance of natural resources, in line the African Union Peace and Security.

### 2.5.2 Issues Raised

**Eritrea:** It was observed that due to America's dominance, China's coming provided an alternative however ambivalent. The fact that it is the only alternative to America's dominance this has contributed to the ease with which they have penetrated certain areas of our economies and their continued exploitation of our resources. Their passiveness is elusive and acts as a cover up for more sinister motives, which is pushing their own agenda of satisfying the need for resources to satisfy the increasing demand for raw material in China.

**Sudan:** A delegate from Sudan stated that, it is claimed that China disregards

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would like to champion your cause if necessary so that they can do it with conviction knowing the implications and results to be born from the same.



# CHAPTER

## 3.0 GROUP DISCUSSIONS

### 3.1 Introduction

The delegates were divided into three groups to embark on the group discussions. The three groups were as follows:

- Group 1: Livelihoods
- Group 2: Economics, Markets & Trade
- Group 3: Governance and emerging Issues

The three groups were given a frame work to guide the discussions and various questions to aid in the discussions. The Matrix below and the questions below were the questions out forward for discussion by the delegates.

#### 3.1.1 Livelihoods and sustainable Developments (Group 1)

- What are the positive factors that encourage Livelihoods and sustainable Developments issues and what are the inhibiting factors that discourage Livelihoods and sustainable Developments issues?
- What are the major risks and vulnerabilities for any action taken for Livelihoods and sustainable Developments issues?
- What capacities do we have in the regional and sub regional level? What are the major / core / important capacity building needs that are there for Livelihoods and sustainable Developments issues how do we fill in the gaps that are identified required in Livelihoods and sustainable Developments issues?
- What actions require immediate regional and sub regional level (IGAD) attention as concerns Livelihoods and sustainable Developments issues?

The matrices provided for this group were:

**Table 3.1:** Question one, group one

<b>No. 1</b>	What are the positive factors that encourage Livelihoods and sustainable Developments issues and what are the inhibiting factors that discourage Livelihoods and sustainable Developments issues?		
	<b>Responses</b>	<b>Actions to be taken</b>	<b>Specific Actions</b>

**Table 3.2:** Question two, group one

<b>No. 2</b>	What are the major risks and vulnerabilities for any action taken for Livelihoods and sustainable Developments issues?		
	<b>Responses</b>	<b>Actions to be taken</b>	

**Table 3.3:** Question three, group one

<b>No.</b> <b>3</b>	What capacities do we have in the regional and sub regional level? What are the major / core / important capacity building needs that are there for Livelihoods and sustainable Developments issues how do we fill in the gaps that are identified required in Livelihoods and sustainable Developments issues?		
	<b>Responses</b>	<b>Actions to be taken</b>	<b>Specific Actions</b>

**Table 3.4:** Question four, group one

<b>No.</b> <b>4</b>	What actions require immediate regional and sub regional level (IGAD) attention as concerns Livelihoods and sustainable Developments issues?		
	<b>Responses</b>	<b>Actions to be taken</b>	<b>Specific Actions</b>

### 3.1.2 Economics and Markets (Group 2)

- What are the positive factors that encourage Economic and market issues and what are the inhibiting factors that discourage Economic and market issues?
- What are the major risks and vulnerabilities for any action taken for Economic and market issues?
- What capacities do we have in the regional and sub regional level? What are the major / core / important capacity building needs that are there for Livelihoods and Economic and market issues how do we fill in the gaps that are identified required in Economic and market issues?
- What actions require immediate regional and sub regional level (IGAD) attention as concerns Economic and market issues?

The matrices provided for this group were:

**Table 3.5:** Question one, group two

<b>No.</b> <b>1</b>	What are the positive factors that encourage Economic and market issues and what are the inhibiting factors that discourage Economic and market issues?
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**Table 3.7:** Question three, group two

<b>No. 3</b>	What capacities do we have in the regional and sub regional level? What are the major / core / important capacity building needs that are there for Livelihoods and Economic and market issues how do we fill in the gaps that are identified required in Economic and market issues?		
	<b>Responses</b>	<b>Actions to be taken</b>	<b>Specific Actions</b>

**Table 3.8:** Question four, group two

<b>No. 4</b>	What actions require immediate regional and sub regional level (IGAD) attention as concerns Economic and market issues?		
	<b>Responses</b>	<b>Actions to be taken</b>	<b>Specific Actions</b>

### 3.1.3 Governance and Emerging Issues (Group 3)

- What are the positive factors that encourage Governance and Emerging issues and what are the inhibiting factors that discourage Governance and Emerging Issues?
- What are the major risks and vulnerabilities for any action taken for Governance and Emerging issues?
- What capacities do we have in the regional and sub regional level? What are the major / core / important capacity building needs that are there for Governance and Emerging issues how do we fill in the gaps that are identified required in Governance and Emerging issues.
- What actions require immediate regional and sub regional level (IGAD) attention as concerns Livelihoods and sustainable Developments issues?

The matrices provided for this group were:

**Table 3.9:** Question one, group three

<b>No. 1</b>	What are the positive factors that encourage Governance and Emerging issues and what are the inhibiting factors that discourage Governance and Emerging Issues?		
	<b>Responses</b>	<b>Actions to be taken</b>	<b>Specific Actions</b>

**Table 3.10:** Question two, group three

<b>No. 2</b>	What are the major risks and vulnerabilities for any action taken for Governance and Emerging issues?		
	<b>Responses</b>	<b>Actions to be taken</b>	<b>Specific Actions</b>

**Table 3.11:** Question three, group three

What capacities do we have in the regional and sub regional level? What are the major / core / important capacity building needs that are there for Governance and Emerging issues how do we fill in the gaps that are iden

- Provision for (engagement of politician and decision makers, development partners)
- Budget for conservation (greening the environment)
- Capacity building for natural resource management
- Awareness and sensitization of all stakeholders
- Creation of appropriate and supporting legislation and institutional; framework (Lead Agency)

**Key emerging issues and impact or impact on/by the environment and natural resource base**

- Invasive species
- Crisis associated with climate change
  - Ø Flooding
  - Ø Rainfall variation
  - Ø Temperature
  - Ø Loss of traditional knowledge on land use (agriculture – planting crops, grazing)
- Build capacity to negotiate in carbon trading
  - Ø Adaptation to existing situations
  - Ø Mitigating the impact of the problem
  - Ø Take advantage of the existing instruments to avert the emerging issues (carbon trade, clean development mechanism)

**Strategies/actions to better integrate the emerging issues into national development and environmental planning processes**

- Strategic management approaches
  - Ø Promotion of Participatory management approaches
  - Ø Build capacity for negotiation
  - Ø Create an institution/department at Regional level to inform members about emerging issues & possible mitigation
- Formation of national and regional crisis/disaster management
- National governments to provide for research, monitoring and control of the crises

**Existing policy and legal initiatives**

- Convention and legal framework at national regional and international level in place - Popularization of the existing and new legislation
- Awareness creation and sensitization of all stakeholders
- Popularization of the existing and new legislation and related issues

**Perverse incentives**

- Proper valuation of resources - Lobby for or provide support for valuation (human & financial)
- Making punishment commensurate with value of the resource
- Incentive: sustainable utilization through involvement and empowerment of local people

**Combination of land use for improved livelihoods**

- Integrated land management systems - Facilitating information and experience exchange with in the region and internationally
- Formulation and implementation of land use policy e.g. Integrated watershed management
- Land classification

- Harmonization of the policies and laws that impact on natural resources ensuring that they contribute to sustainable livelihood
- Budgeting for capacity building and empowerment of stakeholder

**Management of tradeoffs in environmental management, agriculture, land management and population pressure**

- Cost-benefit analysis
- Capacity building on population management, negotiation and conflict management
- Build on traditional conflict resolution systems
- Promotion of viable alternatives
- Sensitization on effects of population growth on resource use and availability

**Risk and vulnerability issues to be addressed**

- Degradation
- Loss of benefits
- Marginalization of some vulnerable groups (women , children and pastoralists)
- Build on traditional conflict resolution systems
- Facilitating exchange of information and experiences on sustainable/wise use practices at regional and international levels
- Streamlining livelihoods into development plans
- Targeting vulnerable groups in development plans
- Promotion ofTj -42.s/ sustainable(practicess) Tj 162.88 0 TD 0 Tc 0.12 Tw ( ) Tj -369764 -13.9



		<ul style="list-style-type: none"> <li>• Integration of National Economic Accounting Systems with Natural Resource Accounting Systems;</li> <li>• Mainstream Environment in to Poverty Reduction Strategies;</li> <li>• Encourage Economic Research</li> </ul>	<ul style="list-style-type: none"> <li>• Socio-economic Statistics</li> <li>• Information</li> </ul>
III	<p><u>Cross-Cutting</u></p> <ul style="list-style-type: none"> <li>• Human Resources</li> <li>• Financial Resources</li> <li>• Policy and Legislation</li> <li>• Economic Research</li> <li>• Governance</li> <li>• Politics</li> <li>• Culture</li> <li>• Cooperatives</li> <li>• Unions</li> <li>• Regulatory Bodies</li> </ul>	<ul style="list-style-type: none"> <li>• Protocols</li> <li>• Custom Unions</li> <li>• Tariffs</li> <li>• Harmonization of Protocols</li> <li>• Socio-economic Statistics</li> <li>• Information</li> <li>• Integration of National Economic Accounting Systems with Natural Resource Accounting Systems;</li> <li>• Mainstream Environment in to Poverty Reduction Strategies;</li> <li>• Encourage Economic Research</li> </ul>	<ul style="list-style-type: none"> <li>• Capacity Building and Utilization</li> <li>• Regional Trade Protocols</li> <li>• Socio-economic Statistics</li> <li>• Information</li> </ul>

**The questions that governed the group’s discussions were as follows:**

- How are natural resources reflected in national accounting, and other measures of national growth? How can this process be improved?
- Does the country have indicators (and means to measure) that reflect the value of the environment and natural resources in the PRSPs and the performance of all the MDGs?
- To what extent are natural resource assets reflected in national and regional marketing and trade? How can this be improved?
- Is Strategic Environment Assessments (SEA) used in a practical and function manner so that the different sectors (and programmes) responsibly integrate environmental aspects of direct relevance to the sector?
- What are the key emerging issues? How do they impact on, or are impacted by the environment and natural resource base?
- What strategies and actions can be suggested to better integrate these emerging issues into national development and environmental planning processes?
- Where are indicators (in PRSPs) to demonstrate importance of NRs?
- Who is measuring what? – National Bureaus of Statistics? – What do they measure?
- Where are real examples of ENR in national accounts? & use of that data as basis for action and budgeting?
- Is natural resource accounting happening? – If so is it part of national accounts?
- How are Dev & Recurrent expenditures decided (who?) to take into account real contribution of, and need to invest in environment?
- How are natural resources reflected in national accounting, & other measures of national growth? How can this be improved?
- Does country have indicators (& means to measure) that reflect value of environment & natural resources in PRSPs & performance of all MDGs? – What about next generation PRSPs??
- To what extent are natural resource assets reflected in national & regional marketing & trade? How can this be improved?



- Is Strategic Environment Assessments (SEA) used in a practical & functional manner so that different sectors (& programmes) responsibly integrate environmental aspects of direct relevance to sector?
- What is true economic importance of ENR to GDP how significant are these for HHs & livelihoods – especially. Poor?
- What criteria should Gov put in place to guide future decisions to inform scale at which interventions will be more cost effective & environmentally sustainable?
- What packages of incentives are needed to promote & sustain strategic private-public partnerships for ENR management – esp. marketing?
- How can experts advice planners and economist on how to incorporate this in the environment issues into their economic
- What is the economic cost of floods in the region
- Fuel wood resource is changing and with time i.e. in the future it will become an issue how are addressing this;
- How can the ministries of tourism in the region link the benefits of tourism to the direct economic contribution environment and natural resources makes to these industries
- Do we have any example(s) of environment an or natural resource audits or accounting if so how is it reflected in the national accounts or even in the PRSP



5. Foreign interference – which is divisive
6. Lack of coordination and follow-up capacity at IGAD Secretariat level

#### **Actions to be taken**

1. Harmonization of policies:
2. Engagement of IGAD members states in terms of awareness
3. Mobilization of resources internally
4. Diplomacy and awareness to improve on political will. Engagement of political committees and improved knowledge sharing among member states.

#### **Specific Actions**

1. Motivate for reallocation of resources to the environmental agenda (regional)
2. Mobilization of resources (national level)
3. Involve politicians especially the parliamentary committees involved with the environment.
4. Sharing experiences and drawing on the experience of other countries in the region.
5. Engagement of IGAD Member states to promote awareness and advocacy
6. Diplomacy and awareness to improve on political will. Knowledge sharing through field visits
7. Involve stakeholders to cater for national peculiarities
8. Adopt a common agenda or position against foreign interference. Raising our own resources
9. Improve on advocacy and lobbying

**QUESTION 3: What capacities do we have in the regional and sub regional level? What are the major / core / important capacity building needs that are there for Governance and Emerging issues how do we fill in the gaps that are identified required in Governance and Emerging issues**

#### **Responses**

- These capacities to the regional and sub-regional level include:
- Human resource
- Diverse Natural resources
- Regional bodies and organs like IGAD and EAC, research institutions and universities

The core important capacity building needs include:

- Deficiency of awareness on the importance of natural resource conservation.
- Information is inadequate on all issues relating to natural resources.
- Poor accountability of our governments in following basic guidelines.
- Inadequate resources financial, material and technical.
- Stake holder participation is low.
- Follow up (implementation is poor)
- There is low public/private engagement e.g. Governments, the Private sector and NGOs.

#### **Remedies / Solutions**

1. Education and awareness campaigns.
2. Advocacy.
3. Establishment of national data bases in environmental bodies.
4. Improved research.

5. Set up an ombudsman to monitor performance of governments or independent bodies that can check performance of governments regarding environmental issues.
6. Resources: Mobilization of resources locally; partnership with private institutions and universities.
7. Enhanced stake holder participation: advocacy and awareness.
8. Improve information flow.

**QUESTION 4: What actions require immediate regional and sub regional level (IGAD) attention as concerns Livelihoods and sustainable Developments issues?**

**Responses**

1. Globalization
2. Climate change
3. Democratization
4. Conflicts (Regional)
5. HIV / Aids
6. Invasive avian species.
7. Genetically Modified Organisms (GMOs)

**Actions to be Taken**

1. Common positions and standards: Harmonization to internationally accepted benchmarks regarding trade and environment
2. Capacity building to mitigate against climate change
3. Research on climatic change and advice appropriate action plans
4. IGADs increased engagement in conflict resolution
5. Improve natural resource management and utilization including distribution
6. Linkage in terms of awareness about HIV / Aids and environmental management especially the loss of productive human capital
7. Management interventions at regional and sub-regional levels: technology towards elimination of these invasive species. Improve on their monitoring.
8. GMOs: this are a danger to our food security since our locally produced seeds will disappear. I.e. genetic erosion. We should improve on monitoring and evaluation, discourage foreign ones, and improve the quality of our locals' seeds to yield and produce more.

**Specific Actions**

1. Come up with a common sub-regional approach to negotiate with the international community on globalization, climatic change, democratization, conflicts and GMOs. Taking care of national priorities.
2. Capacity building in terms of research on climatic change and logistical support.
3. Carbon trade project preparation and implementation.
4. Information sharing and exchange in the region.
5. In trade and environment, our organic products in the sub-region should be promoted for the international market

**The issues that contributed to the group's discussion were as follows:**

- Decentralization, devolution, deconcentration – are we really devolving to rural people their rights & responsibilities or is it the rhetoric of participation
- Gender & equity in decision making – who is making decisions, why? – Who is included & excluded?
- NR conflict (water, land, resources)

- What are the key emerging issues? How do they impact on, or are impacted by the environment and natural resource base?

# CHAPTER

## 4.0 CLOSING SESSION

The workshop came to a close with the delegates representing each country in the region being asked to give feed back to the workshop organizers and the facilitator. This was done in alphabetic order. Their comments are given below.

### 4.1 Feed Back From the Participants

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**Djibouti:** They said they were satisfied with the conference and they would be handing in their comments in writing at a later stage.

**Eritrea:**

**Uganda:** The delegates begun by thanking the organizers and participants. They also said that the objective of the workshop was met, by virtue of the fact that they were made of the dire need for policy and strategies for environmental and natural resources management. They requested that IGAD, IUCN, National Organization etc. Should attach value to the resources we have. They emphasised on the need to have a time bound plan for the various actions suggested during the course of the workshop. They also suggested that we should from time to time evaluate the progress made. In line with this suggestion it was also suggested that we make an action plan and time frame. They expressed their concern that they missed the detailed country reports and requested that this be put in the report to be circulated.

## 4.2 Closing Remark

**Chairman Dr. Kennedy Ondimu (Ministry of Environment and Natural Resources Kenya):** The chairman appreciated the fact that one can create awareness that would then enable the people use the resources available to them i.e. build the capacity for people to utilize their resources. The challenge however is how we use awareness to resolve conflicts on natural resources. It is also important that we appreciate the fact that many insecurity hotspots in the region and in Kenya are as a result of Natural resources. The question therefore begs, how do we best engage communities in the exploitation of natural resources for their own benefit, in areas such as South

communicated to the council of ministers which is the highest decision making organ of IGAD. He noted that a high turnover of participants in/during the process is a problem that undermines strides made in the negotiations and efforts made. On the issue of a time line and action plan he said that it would be put into consideration as it is a valid and relevant idea to restrain ourselves into a specific time line. All in all he was happy that the workshop was able to bring together economists and planners to discuss the environmental and natural resources. He suggested that we as a region and as countries should weigh the costs and penalties of inaction versus the benefits and fruits of action. He said that they (IGAD) will put in place follow up mechanisms in addition to this he mentioned the fact that the council of ministers had asked for a panel of specialists / technicians to advice them. He said he would be calling on certain people to do the same.

### 4.3 Vote of thanks

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The vote of thanks was given by the delegate from Eritrea. He started by thanking IUCN, IGAD and the host country Kenya. He made specific mention of Ms Florence. He quoted Mr. Francis B. Who said “We can’t command nature except by obeying it”. He noted that we are currently facing the consequences of not respecting / obeying nature. He also noted that we have a tendency of not valuing the social aspect of such meetings which is sad for it is important. He gave an example of a social aspect that would have been lost to some i.e. Eritrea and Ethiopian delegates sat, ate and interacted together. In conclusion he acknowledged the organizers initiative to bring together people from different backgrounds (Economists / planners and environmentalists) as a timely intervention to an increasingly complicated issue.

After this the meeting was ended by the chairman Dr. Kennedy Ondimu who expressed his pleasure in the workshop having achieved its objective.





## A1: The conference Flyer



**IGAD Directors of Conservation and Directors of Economic Planning Conference: “Environment and Natural Resources as a Core Asset in the IGAD Region for Wealth Creation, Poverty Reduction, and Sustainable Development”**

IGAD – the Inter









Reduction, and Sustainable Development. I hope you will find some time to visit our touristic town of Mombasa and its environs.

Distinguished Delegates, Ladies and Gentlemen when IGAD was created, its mandate was to coordinate member states efforts in combating drought and desertification. Some 20 years down the road, IGAD has grown from strength to strength and has become a vehicle for forging and implementing developmental policies and strategies in the sub-region. The Authority has been revitalized and its mandate expanded to include environment and food security, political and humanitarian affairs and economic cooperation, including infrastructure development, tourism and telecommunications.

Distinguished Delegates, Ladies and Gentlemen, I am encouraged to note that IGAD has embarked on some of the critical issue in socio-economic development and sustainable natural resources management in the region. In this regard, the nexus between livelihoods and natural resources management, natural resources governance and economic development, market chains and value adding on natural resources, natural resources economics and national accounting and emerging issues and their potential impacts on the natural resources and the sustainable economic growth of the region are to be deliberated on.. The outcome of such a discourse, I believe will lead us to the development and implementation of sustainable natural resources and environment management strategies and practices in our countries so as to guarantee sustained economic growth in the region, not only for current generation, but also for generations to come.

We all know that twenty years after IGAD was created environmental problems have increased despite the efforts by IGAD in seeking for solutions. The population dynamics of the region continue to be very vibrant; it is growing fast with lots of movements between and within rural areas as well as rural urban migrations. With the movements new consumption patterns are acquired which lead to higher demands for food, raw materials and recreation space.

These rapid changes in the socio-economic dynamic of our people do not necessarily change in tandem with regulatory regimes for the management of our lands and natural resources. Thus our resources continue to be degraded not because we are not aware but that the institutional and legal frameworks have remained stagnant and out of context. The new socio-economic settings of our societies need to be well understood if new regimes have to be responsive to the current needs.

IGAD has not managed to get all solutions for the degradation of our environment and natural resources because with the growth of populations and exposure to world markets there is pressure to exploit and market them including our valuable biodiversity, minerals, forest products, wildlife, water and forage for livestock production. These are the root causes of many conflicts in the region. The search for conflict resolutions for the myriad of these conflicts have taken a toll on IGAD and whatever progress is made in any area is

of view, have come at the right time during a critical transition period in the history of IGAD.

Distinguished Delegates, Ladies and Gentlemen, The importance of appropriate policies and strategies in sustainable livelihoods and sustainable natural resources management in achieving sustainable development cannot be underscored. The ability to have the right policy and strategy at the right time to make the right decision is crucial to achieve such lofty goal. I am therefore convinced that the current debate and its outcome will contribute to strengthening the environmental institutions in the IGAD region, but most of all, to the protection and prudent use of the natural resources base of the region.

Distinguished Delegates, Ladies and Gentlemen, I thank IGAD for giving us the opportunity to host this important meeting. I also wish to thank IUCN for co-organizing this meeting.

With this few remarks I wish you very successful deliberations and a nice stay in Mombasa. Thank You.



## A3 Workshop Agenda

**The Overall theme of the workshop was** “Environment and Natural Resources as a Core Asset in the IGAD Region for Wealth Creation, Poverty Reduction, and Sustainable Development”. While the purpose was to understand the extent to which environmental assets (goods and services) are important to livelihoods of people in the IGAD region and the extent to which such values are integrated into macro-economic planning (PRSPs) and so support national and regional delivery on the MDGs.

**There were four main Objectives** for senior decision makers in National Planning and Conservation related Ministries this was to:

1. Create Awareness and understand the importance of the environment, and in particular the natural resources in improving the livelihoods of people in the IGAD region;
2. Demonstrate the importance of the environment and natural resource base as a key asset in livelihoods (PRSPs, MDGs, performance – indicators);
- 3.

## A4: List of participants and Contacts

IUCN /IGAD Directors of Conservation, Directors of Finance & Planning Meeting, Sun-n-Sand Hotel, Mombasa, 22-26 October 2007 (Delegates List)					
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## **A5 Executive Summaries of all the National Studies**

### **A5.1 DJIBOUTI REPORT: By Nabil Mohamed September 2007**

#### **Executive Summary**

Djibouti's main assets are its strategic location on the Horn of Africa and its harbour and associated infrastructure which made the third sector (based on services and banks) very important compared to the primary and secondary sectors. Djibouti's economy is characterized by an extreme duality, as it is divided between a modern outward-looking urban commercial sector and a rural subsistence-based pastoralism economy which has little access to infrastructure, services and markets. Changes which have taken place over recent decades in national economic indicators and activities had little impact on the rural population, who continue to engage semi-nomadic, subsistence-level livestock production activities. The major part of this rural population lives under absolute poverty conditions. Poverty is omnipresent and very widespread. 2/3 of the population live below the poverty threshold, among which more than 50% are urban and the major part of the rural population who lives under absolute poverty conditions.

In this global context of poverty, environment and natural resources play special role in the life of the poor and particularly in rural areas where more than one third of the population depends on livestock, fisheries, remaining forests, woody areas, agriculture... for employment and/or survival. Much of the potential to diversify national economic production in Djibouti depends on the development of various different natural resources-dependent sectors such as, livestock, fisheries and agriculture. All these sectors already make an important contribution to national food security, employment, income and – potentially – exports but are not really reflected in national accounting or other measures of national growth. Although their importance in the livelihood of people in Djibouti, environmental assets is poorly integrated into the macro-economic planning to efficiently support the Djibouti Millennium objectives and the New Initiative for Development).

The evolution of society, globalisation of the exchanges and emerging issues (climatic changes, GMO'S...) oblige the countries to adapt the performances of their economy in a context of disengagement of the state. For that purpose, natural resources are a major asset for rural people. The question is how to reconcile, the Djiboutian social requirements of poorest people and the performance of the economy?

Some opportunities (favourable institutional context, international conventions and agreements...) are already in place in Djibouti to empower communities so that natural resources can serve as platform of economic opportunity onto which social capital can be built. The Decentralization policy engaged by the government aims to transfer some of the central government functions and powers to the regions (regional policy of development as well as responsibilities, education, social services...) to ensure good governance. The questions are: at which level these communities are able to take in charge such responsibilities? How important is the articulation between the communities and the local governments?

Some difficulties of various natures (absence of organization, assistance, low financial resources, low technical capabilities, no access to information, and no clear vision in the long term which is based strategic orientations, access to land, property rights...) prevent rural people to take in charge the management of their natural resources and improve their livelihood.

The solution mainly lies in the capacity of these communities to be implied in the construction of strong institutions: co-operatives and associations which are invested in the organization of market chains and installation of social services on the rural territory. These co-operatives will have to function as professional organizations which help the producers to recover a greater added value of their production. They will accompany the exploitations in the technical and economic improvement and their performances and will manage infrastructures. Lastly, they will constitute a force of negotiation face of markets, public authority and local authorities. The future of these communities confronted to the liberalization of the markets and to the disengagement of the state passes by the recognition and the reinforcement of these professional Community organizations, within the framework of the partnership between the public and private sectors. It is today one of the conditions of the rural development and the connection of the producers to the national and international markets.

In addition, in spite of the decentralization policy encouraged by the state, there is still a weak articulation between the rural organizations and the local governments. However, a greater synergy should help the local communities to be interested more in these Community organizations which are their natural prolongation in particular with regard to information, sensitizing and training of their members on the aspects related to decentralization, the natural resources management strategies and citizenship. This articulation should also help to solve the question related to the access to land whose management is entrusted to the local governments and traditional rules.

Whatever the actst02 0 ic ts

- Large proportions of the households (45% in Barka and 59% in Gash) are dependent on forest resources for their livelihoods, which is in the range 15 – 30% of their total income.

Transitional Economic Growth and Poverty Reduction Strategy paper (TEGPRS), lays out the government's policies for macroeconomic management. I-PRSP is anchored mainly on restoring economic growth, while maintaining macro-economic stability and raising Income of the poor segments of the population and putting in place the enabling environment. The Food Security Strategy which is based on improving agricultural productivity and marketing of agricultural output; enhancing national capacity to import food, including keeping a strategic reserve, and using international food assistance more efficiently.

Food Aid policy is based on Legal Notice 26/96 – Food Monetization Policy in 1996, which would make Eritrea less dependent on foreign aid. The aim of the Medium Term Agricultural Sector Development Plan is to achieve food security by identifying potential areas and deploying resources in a co-ordinated fashion. The aim of the Energy Sector Development Plan is to increase alternative energy resources. The perverse incentives (policy, law, markets) that hinder progress are:

- Lack of an umbrella **Environmental Law and Sectoral legislation**;
- Government's inability to **enforce laws** governing use of, and access to land and/ or natural resources can lead to widespread exploitation of Natural Resources.
- An **Agricultural Development Policy** that focuses mainly on increasing the production of goods without addressing the sustainability of the resources;
- **Transforming** naturally rich range vegetation to cultivated farms and farming into marginal areas and/or farming along the banks of major rivers of Gash Barka;
- Eritrea does not have land use planning regulatory framework.
- The new **land proclamation** (Law No.58/1994) has not been implemented fully;
- The border **conflict** with Ethiopia is also one of the major barriers that prevent people from being able to benefit from their natural resource assets on a sustainable manner.

### **Natural Resource Governance at the Core of Sustainable Development and Livelihood Improvement**

#### **Natural Resources Governance, Devolution and Rights and Gender**

The Proclamation for the Establishment of Regional Administrations (No. 86/1996) and the Land Reform Proclamation No. 58/1994 provides the necessary legal basis for implementing decentralized governance of natural resources. Insecurity of land tenure in rural areas in Eritrea prevents people from investing in long-term activities, which may contribute to the protection of the environment and natural resources. The Land Proclamation 58/1994 has solved the gender discrimination, because traditional land tenure system had discriminated women's right in land use.

Extent of policy and legal implementation:

- Not many of the Line Ministries had given emphasis to environmental issues;
- There is as such no policy or laws that hinder local communities, however, there are a lot of modalities and market access that need to be made available for poor people;
- The rural communities are adequately informed about their rights and responsibilities; however modern methods of Governance structures have being introduced without proper technical and financial support.



exploration companies are by law required to carry out SEIA, before the granting of mining licenses.

### **Analysis of the Important Emerging Issues With Respect To the Environment and Natural Resources**

The key emerging issues in Eritrea are the following:-

1. **Invasive Species:** The fragile and degraded ecology of much of the landscape provides great opportunities for alien invasive plant species such as *Prosopis chiliensis*, to establish themselves and spread.
2. **Climate Change and Adaptation:** As identified by the INC and NAPA studies, the groups that are most vulnerable to climate risks are those that directly depend upon natural resources for their livelihood. These are: subsistence farmers, rural dwellers, pastoralists, urban poor, fishermen and island residents
3. **Genetically Modified Organisms (GMOs):** Though GMOs do not pose immediate significant threat, nevertheless Eritrea has drafted a National Biosafety Framework, to put biotechnology and biosafety regulatory mechanism in place to enable it check and control the safe transfer, handling and use of the products of Biotechnology.
4. **Carbon Trade:** Traditional stoves, “Mogogo” have been improved to increase their efficiency. Each improved stove reduces fuel wood consumption by 21 % and reduction of 0.6 tone of CO<sub>2</sub> per year. So far 22,000 have been disseminated nationwide since 2005.
5. **HIV/Aids:** Although HIV/AIDS is not an environmentally related disease, nevertheless it has an impact on household structures, incomes; labour and cost of caring for people with AIDS are high.
6. **Effects of Globalization:** Although globalisation has encouraged free trade, economic integration and competition, the main beneficiaries so far have been the advanced developed countries.
7. **Conflicts, Insecurity and Environment:** Disasters such as conflicts, insecurity, drought, and environmental degradation have affected the poor substantially and clearly exacerbate economic deprivation in the short term. They can also compromise a household’s long-term economic well being if survival requires the sale of assets, such as those the family had planned to use to finance their children’s education.

### **The main questions that need to be addressed in terms of integrating the environment into poverty reduction include:**

1. How can National Food Security be achieved sustainably and can international food assistance be used more efficiently and effectively?
2. African countries are carrying out major promotional campaigns not only internationally but also regionally for markets, however it seems a daunting task as even the Western countries are protecting their markets. What can be done to resolve this issue?
3. Although no nation can claim to be totally self-reliant it is believed that self-dependence enhances people’s independence of thinking, innovativeness, perseverance and pride in work and these attitudes permit and accelerate economic development. Hence can one say that the policy of self-reliance is a fallacy?
4. Can natural resource governance and sustainable development and livelihood improvement be achieved in countries that do not practise good governance?







communities out of poverty in Ethiopia and subsequently invest on their lands. The new approaches to rural development, i.e., differentiated growth strategies according to agro-climatic factors, potential plant species, and market access, is a commendable start towards strategic environmental management. The major focus is on expanding the production, utilization and market opportunities of high value and including trees crops: 'A Value Chain Strategy'. However, many small farmers who tend to be illiterate and poorly connected with market systems lack the information and bargaining power to benefit fully from market transactions. As a result, they receive a smaller share of the consumer price of their products than they should; they have difficulty getting access to inputs, and in addition they pay higher prices for them.

The government of Ethiopia has a key primarily responsibility of ensuring that the benefits of economic growth are equitably distributed across society. It has to establish enabling environment that markets function efficiently and that the playing field is level for all participants, including the smallholders and traders. However, policies and institutions that best suit these responsibilities are not in place.

The memory of redistribution of land in the last three decades is one of the greatest sources of land tenure insecurity and anxiety among the rural population; current federal and regional land laws restrict inheritance of rural land to family members who are resident in rural areas while the country's succession law does not put any restriction to which one can bequeath their property and rights; this undermines investment on land.

Rural landholders cannot exercise their right nor could they discharge their obligations if they do not have adequate knowledge of their rights and responsibilities. Similarly, the judiciary and land administrators cannot uphold land laws and regulations and enforce them unless they are familiar with the laws, regulations and procedures. Other stakeholders such as investors, land renters, financial institutions and utility companies, municipal and township administrators need to know land laws and regulations as well to properly carryout their functions and discharge their responsibilities. To this end, concerted efforts need to be taken by regional states to create adequate public awareness on their land administration, land use, land valuation and compensation laws and regulations using various media and fora.

Natural resource accounts (NRA) and environmental indicators are widely recognized as providing a framework for information and analysis needed to support macroeconomic policy analysis for sustainable economic development. The national resources accounts

governance; strengthening human capacity at all levels; promoting effective interventions for smallholder market development; improving the extension approach and technology acquisition; revisiting the land tenure laws and resettlement programmes; improving institutional responsibilities; strengthening local level community base organization; empowering the local community; mainstreaming gender issues; enhancing private sector participation and strengthening public-private partnerships.

#### **A5.4 KENYA REPORT: By Reuben Sinage, For IUCN and IGAD, September 2007**

##### ***Livelihoods - wealth creation and poverty reduction***

**Natural resources as core component of people's livelihoods:** Although an ecosystem performs four major services (provisioning, regulating, cultural and supporting) for maintaining the ecosystem and survival of man. The critical natural resources of an ecosystem that perform the provisioning services for a household are: (i) land (landscape, soils, rock, minerals, agricultural, range, conservation areas etc); (ii) flora (micro & higher plants - terrestrial and aquatic, vegetation communities); (iii) fauna (micro-organisms, wildlife, terrestrial and aquatic); (iv) Atmosphere (air, weather, climate); and (v) water (in soils, atmosphere, flora, fauna, natural reservoirs like aquifers, rivers, lakes, seas and oceans). These are essentially ingredients to the livelihoods for every household.

They are all being degraded through unsustainable utilization by the ever increasing populations. The per capita availability of resources like water and biomass fuels is now critical. This is exacerbated by lack of or inappropriate use of technology in the conservation and production and changing consumption patterns. This just spells gloom and doom to the communities concerned. People's livelihood systems, wealth creation and fight against poverty and disease revolve around basic needs that are in turn the provisioning and cultural services of ecosystems. Below is a summary on how the natural resources are core components of people's livelihoods in Kenya's socio-economic fabrics:

**Agriculture for poverty and food insecurity eradication:** Poverty and hunger (food insecurity) and diseases have been the 3 big challenges in Kenya since independence. Agriculture is key to Kenya's overall national economic and social development. It contributes about 26% of GDP and a further 27% through linkages with other sectors. It contributes about 60% of national export earnings. It is the main source of livelihoods for the majority (80%) of Kenyans who live in the rural areas. The ASALs alone host about 70% of the national livestock population with an estimated value of about Kshs 70 billion. Pastoralism provides direct employment and livelihood to over three million Kenyans. However due to population pressures and use of poor or inappropriate production technologies and marketing, >57% of the population live below the poverty line due to land degradation and declining productivity. This has resulted in over 50% of Kenyans being food insecure. These are indications that the ecosystems' natural resources are being overstretched and degraded leading to food insecurity, poor health and poverty intensification. *Sustainable and high productivity in the agriculture sector will depend on investments, technologies applied, seeds quality, marketing infrastructure, soil and water conservation. SLM is therefore the key to breaking the land degradation and poverty vicious cycle.*

**Production of fibers for clothing:** The production of fibres is part of the agricultural production systems. Industrial processing and value addition of the cotton, wool and hides contribute significantly to the livelihood systems of Kenyans. The industry has declined over the last 10-15 years due to the structure of world market. This decline has contributed to poverty intensification in the affected areas. *New production and protection policies are needed to address the unfair trading regimes in the world market.*

**Water for life, agriculture and industry:** Water is for domestic use, agriculture and livestock productions and hydropower production. It is the most limiting factor in the

provision of other services in the 80% of Kenya (ASALs) that host ~35% of Kenya's population. Rainfall is seasonal, low and erratic with uneven temporal and spatial distribution, resulting in uneven distribution of watering points. Therefore nomadic pastoralism is practiced as a production strategy by the nomads that follow water and forage. In contrast, the humid and marginal dry sub humid zones receive enough rainfall for sustaining rain fed agriculture for a range of crops for each sub zone and livestock keeping. In urban areas water is needed for domestic and industries which provide livelihoods to many families. Inter-basin transfers for Nairobi, Mombasa, and Nakuru have become necessary because of local shortages. Per capita freshwater availability is 930m<sup>3</sup>, below the internationally accepted 1000m<sup>3</sup>. This makes Kenya a water scarce area. Because of the climatic factors, rapid population growth and industrialization, per capita water availability will decline to only 235m<sup>3</sup> per capita per annum by the year 2025. In all ecosystems frequent drought and/or flood hazards threaten lives, property, infrastructure and cause food shortages and hunger, all of which affect the livelihoods of the communities. *Water harvesting and conservation measures including recycling must be put in place in order for this resource to continue sustaining livelihoods and industrialization of the country.*

**Energy for domestic and industrial services:** Energy is needed for cooking, heating, lighting, industry and transport. Kenya's total national energy demand relies on biomass (80.5%), petroleum (18.0%) and electricity (1.4%). Petroleum is imported and the rest is sourced from local ecosystems. This underscores the contribution of biomass fuels to livelihoods in the country. In the rural areas biomass energy accounts for 98% of energy needs. In 2000, it was estimated that the country experienced a deficit of 20million tones of biomass fuel which will rise to ~31.2 million tones in 2015. This demand is leading to industrializf(Thitstone928t 72 0 TD 3fuel .22.44 0 Knr a0 9 Tw ( ) at96ustbg39e2 0 Tcosg Tw rest is livelihoods of the w0 Tw ( ( ) Tj 270.3.92 TD 329111 Tc es Ketppdi thrc 0.3637 ( ) Tj -145.2 -10968 TD 8.74038 Tc



working well ahead of wildlife policy review; water user associations were formed ahead of the water policy and act; and individual and community forestry is ahead of the forest policy and act which will promote the activity. Success in implementation of existing policies and laws is always mixed because it depends on resources, capacity, determination and political will. Successes include community conservancies, Water Trust Fund, community forestry and failures include loss of state forests and biodiversity.

**Equitable distribution of costs and benefits of devolved natural resource governance:**

All new policy and legal reforms consider equity including gender equity. There is now a general sense that all governance structures should include at least 30% women to influence their own course. The draft land policy recognizes women among the vulnerable groups whose land rights have to be recognized and resolved. The governance structures will include gender balance while respecting community traditions as far as possible. The rejected draft constitution would have affirmed this in all sectoral reforms.

**Information, awareness and preparedness of communities on their rights and responsibilities for devolved NR governance:**

General awareness of the people's rights and responsibilities to a clean environment as enunciated by EMCA is inadequate. This implies that they cannot demand for equitable sharing of benefits from natural resources services like genetic resources, of which they are the custodians. Communities are therefore not ready for devolved NR governance. The challenges for information and awareness raising are many. A population that is aware of its rights and obligation will participate and contribute towards the management of the environment for its own benefits.

***Market chains and value adding on Natural Resources***

**How communities can better engage in the market to trap more income locally:** Over 57% of Kenya's rural population lives below the poverty line of \$1.00 a day and yet they live in ecosystems that fetch substantial national income through ecosystem services e.g. biodiversity (ecotourism, harvesting timber, fuel-wood, harvesting of genetic resources, livestock grazing). It is because of poverty and low pricing that they tend to over-exploit the resources, which lead to unsustainable land use and biodiversity resources. The loss is particularly severe where expansion of crop cultivation is possible. One way of tackling the two issues of poverty and unsustainable use of environmental resources is through organized entrepreneurial community-based natural resources management (CBNRM). The CBNRMs groups can take advantage of the growing global natural products industry that is currently valued at US\$65 billion per annum. These products represent key sub-sectors of food and beverages, cosmetics, herbal medicines, pharmaceutical, gums and resins and biofuels. The ecotourism industry is even larger. The benefits that trickle down to the community are meager when the value of the whole industry is examined because of various factors including complex and costly market chains with very many players. This erodes the proportion of gate price to the producer to less than half of the consumer price. The difference goes to various actors along the chains. Strategies for successful commercialization of natural resources include: supply chains development; trade services to the communities; products research and development; market development; long-term investments; negotiating for favourable market regulatory mechanisms; use new approaches and instruments carbon trade; shortening the market chains and control marketing cost elements; provision of market information to all players; and evolve governance structures that ensure active participation of all players – producers, businessmen (investors) and consumers.

**Policy, institutional and structural impediments for such engagements and the solutions:** There are four main challenges for the development of markets in order for communities to gain meaningful livelihoods from their natural resources and products:

- Weak policy, legal and institutional frameworks in support of local communities and their products;
- Poorly developed markets for natural resources products;
- Low productivity and lack of standards and quality control mechanisms;
- Inadequate market information to all players; and the unfair global trade regimes.

**How communities can sustainably process and value-add on NR based products:**

Lose of quality of rural produce during transportation to markets; the unnecessary take by middlemen, traders; and the excessive marketing costs leave the producer with very little reward for his labor. These can be avoided if processing were to be done close to production sites. This will, in addition, create employment to community members.

However there should be in place several incentives for the in0 3.15han(·)a9kh f.0nd valprodu





- provisioning services are the most directly relevant to livelihood systems for the creation of wealth and poverty reduction.
3. The ecosystems provisioning services are for the following man's basic needs that ensure his survival: food, clothing, water, energy, shelter, health, cultural fulfillment, security.
  4. The per capita availability of certain finite natural resources are increasingly becoming critical because of rapid population growth and demands. This is leading to the un-sustainability of their utilization and degradation and is exacerbated by changing consumption patterns and attitudes of the people.
  5. Low agricultural productivity, increasing population and high poverty levels have resulted in over 50% of Kenyans being food insecure. These are indications that the ecosystems' natural resources are being overstretched, degraded or even being inefficiently utilized in the provision of food production services. Land degradation and desertification are therefore of great concern to Kenya. They cause food insecurity, famines, poor health, and poverty intensification.
  6. The productions of fibers for clothing especially cotton and wool have significantly declined over the last ten years due to the structure of world market for these commodities rather than because of environmental degradation. This decline contributes greatly to poverty intensification to the production areas due to lack of alternative livelihoods.
  7. Annual per capita availability of fresh water is declining rapidly due population growth. The per capita availability of fresh water is declining rapidly due to the

- world market. Because of demand, it has also motivated traditional medicine practitioners to form associations and practice openly.
12. Contribution of environmental and natural resource assets to the achievement of the MDGs and PRSP have been recognized by the Government. Thus a needs assessment has been made to ensure that there are clear linkages between natural resources assets and the achievement of MDGs by mainstreaming them into the PRSP and Economic Recovery Strategy (ERS). This has particularly been carried out for Goal 1 on eradication of extreme poverty and hunger, Goal 7, target 10 on providing sustainable water and sanitation services, Goal 7, target 9 on ensuring environmental sustainability as well as for energy requirements. Establishment of a coordination office for MDGs indicates the government's determination to achieve the MDGs.
  13. Natural resource governance is in the process of being devolved to the lowest accountable bodies, people and communities through the EMCA and the new water and forest acts. Draft constitution, draft land policy, draft ASAL policy, draft wildlife management policy, all embrace the principle of devolution of powers and structures to the lowest level. Despite the on-going devolution processes, the thorniest issues are on tenure (ownership, rights and access), equity, and gender sensitivity at all levels. Traditional and customary institutions in the governance of natural resources are however strong in many communities.
  14. Improved natural resource governance will improve rural people's livelihoods and reduce risk mainly tremendously through the proposed national land policy and subsequent bill. The policy streamlines and strengthens the tenure systems is gender sensitive and devolves the administration of land issue to district levels. It further addresses issues and management of sustainable land use including ecosystems protection. Other policies under consideration under different laws are on access and equitable sharing of resources.
  15. Ownership of resources by the communities will give them rights to equitable share of the market value of various products from their land or ecosystems. They will therefore realize the value of the resources and form livelihoods around the resources. This will reduce the risk of environmental and natural resources degradation.
  16. Policy and legal rhetoric are being put into practice on the ground to some extent depending on resource availability and society's perceived needs, economic gains and socio-political sensitivity to the issue. Examples abound in the water and forest sector reforms.
  17. Processes of devolution of powers and gender sensitivity and equity are on-going debates and being implemented gradually sometimes ahead of legislations. It is therefore hope that equitable (including gender equity) distribution of the costs and benefits of devolved natural resource governance, including equity in access and ownership rights, land and resource tenure will soon be part of Kenyan society norms and practices with the backing of various laws and regulations including the constitution.
  18. Rural people and communities are not adequately informed about their rights and responsibilities for devolved natural resource governance, and may not be in position to take on such rights. This is because of difficulties in awareness raising and education level that make such an undertaking a big challenge.
  19. Rural people can better engage in the market so that larger proportions of income from natural resources are trapped at the community through four main actions:
    - a. Shorten market chains and control market cost elements to benefit producers.
    - b. Provide market information to all players to stabilize market prices.
    - c. Evolve governance structures that ensure active participation of all players – producers, businessmen (investors) and consumers and lead to local addition.

- d. Try new approaches and instruments being developed include payments for environmental services.
20. There are 4 main challenges for the development of markets in order for communities to gain meaningful livelihoods from their natural resources and products:
  - a. Weak policy/ legal frameworks in support of local communities and products.
  - b. Poorly developed markets and especially access to international market.
  - c. Low productivity and lack of standards and quality control mechanisms.
  - d. Inadequate market information - incentives to rural people and investors alike.
21. Rural people and communities can better process and value-add on natural resource based products in a manner that is socially beneficial and environmentally sustainable through cutting marketing costs and the government putting in place supportive policies like incentives for investors that include tax breaks, assurance of a minimum production volume and quality, existence and access to the market and returns in minimum time.
22. The market chain for the natural products at the lowest level includes the producers/suppliers who may be individuals or communities, who produce or gather the raw materials from the ecosystem. The communities may be supported to produce, gather the products by technical support for example line technical government departments or NGOs. Raw material buyers/businessmen together transporters are a set of players in the chain that will enable the processing investors receive the raw materials. Investors for processing the products locally or away from the producer community are an important group in the market chain.

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underground water provides 4500 million m<sup>3</sup>, the seasonal streams give up to 6000 million m<sup>3</sup> while fall which varies from one year to another gives an average of 1000000 million m<sup>3</sup> water under normal rainy season.

Population projection for year 2006 reveals that Sudan total population (000) =36297.0 classified by mode of living as 29.09% Urban and 70.91 Rural, showing that more than 70% of the total population lives in rural areas. They are mainly traditional farmers and pastoralists directly depend on their natural environment for their livelihoods and survival. Crop production and animal raising depend entirely on the renewable natural resources. Food crops Dura, wheat, Millet and other cereals are grown over vast areas of central clay plains in central Sudan and on the undulating sand dunes of the West under rain-fed traditional and semi-mechanized systems. Cash crops cotton, sugar cane beside fodder crops and some food crops are grown in the irrigated projects. On the other hand sandy soils of the West provide the most suitable environment for sesame, ground nuts and others as cash crops. Range lands of total area reaching 68.45 million hectares provide more than 80% of the animals and wildlife feed. Recently petroleum as unrenovable Natural Resource adds nearly 9% to the country's GDP.

Inspite of the immense diversified resources assets the country possesses, Sudan is described as land of misused resources, hardship and poverty. It is rather difficult to reach an accurate estimation of the level of poverty in Sudan at present; due to lack of recent poverty data, it could be argued that poverty in Sudan may perhaps be in the range of 50-60%. Poverty rate is higher in the rural areas compared to urban centers.

Eradication of extreme poverty and hunger is the top listed goal under the UN Millennium Development Goals (MDG's). Sudan has unlimited opportunities to achieve this goal, because of its immense and diversified Natural Resources. (Vast agricultural land, surface and underground water resources, wealth of livestock of all kinds, minerals and other underground resources including oil and gold). Sudan economy is mainly agricultural and the agricultural sector constitutes the core of Sudan life and the main driving force of the economy even with the emerging oil sector.

To make Sustainable integrated rural development possible, we need rational integrated Natural Resources management, policies and legislations. Sudan was one of the first African countries to promulgate legislations concerning protection of the environment. Government records show that there are about 150 acts, orders, guide lines and regulations addressing environmental issues since 1903, the most recent and important ones are: 1- The Environmental protection act (2001). 2- Forest and Renewable Natural Resources Act (2202); and Sudan National Interim Constitution (2005) in which there is a clear commitment towards the environmental protection.

Sudan could be one of the richest countries in the World. However perverse incentives prohibited the rural poor to use their Natural Resources effectively. Lack of explicit land use policy supported by legislation, a situation that continues to generate intensified conflicts among the different land users.

**Land tenure:** Successive laws and decrees have undermined the legal rights of rural Sudanese communities in general, and the small producers (farmers and pastoralists) in particular. Especially egregious and repressive is the 1970 Unregistered Land Act that created land as a scarce commodity subject to privatization, accumulation by a minority and commercial speculation that resulted in modified local land tenure systems and conditions of popular access to and control over land and, therefore, setting in motion a process of continuous alienation of agro-pastoralists from their traditional homelands. The Act, a de facto nationalization by the state, denies any formal legitimacy or juridical status to traditional property rights and implies the cancellation of all rights relating to water,









ecological boundaries. The mis-match of the two reduces the chances of cost effectiveness and harmonization in the management of the ecosystems. Within the constitution provision for local governments to cooperate on matters of development including conservation, Uganda should define criteria to guide management of shared resources by local governments and put in place support systems to ensure same standards and joint planning and management for those resources.

As the country prepares itself to evaluate PEAP and develop a new one, it must make choice on a few indicators that demonstrate a very powerful linkage between environment and development, and in turn rally political support. Beyond that, an institutionalized system to periodically carry out joint assessment of ENR sector must be put in place to measure progress. Such assessments are for example now a common feature of the sectors of Health, Local Government and Water and Sanitation.

By virtue of high dependence on agriculture and natural resources, Uganda faces numerous stresses and shocks, some potentially catastrophic. The Uganda National Household Survey 2005/2006 (Agriculture Module) revealed that 43% of all national crop plots suffered from damage, mainly due to rain shortage (19%), followed by crop disease (10%). The level of risk facing poor rural households has risen with increased market exposure linked to globalization matched by the withdrawal of the state for the direct provision of services such as those provided through state marketing boards, subsidies and price controls.

Households lost out when they responded to government call to plant vanilla whose prices subsequently fell on the world market. Climate change too is increasing vulnerability. Domestic shocks, such as the HIV/AIDS pandemic, have further weakened the position of many poor households.

Reducing levels of risk, where possible, and provision of instruments to reduce vulnerability has to be a central element of prop-poor development policy in Uganda. This not only provides social protection for poor people, but enables them to undertake new, viable but more risky livelihoods, increase their participation in markets and generate pro-poor economic growth. Once farmers cannot cope with risk and vulnerability, it is the whole economy to suffer. A challenge therefore is to mainstream risk and vulnerability reduction into development planning.