

**Africa Environment Information Network
Stakeholders' Meeting**

24 – 26 February 2003



AFRICA ENVIRONMENT OUTLOOK

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AFRICA ENVIRONMENT OUTLOOK

Africa Environment Information Network Stakeholders' Meeting

24 – 26 February 2003
Court Classique Hotel, Pretoria, South Africa

REPORT

1. Background

The Africa Environment Information Network (AEIN) initiative has evolved as a direct response to political and technical needs expressed by the African Ministerial Conference on the Environment (AMCEN). A central objective of AEIN is to *build capacity* for establishing the essential data foundation and information management framework needed to support country-level integrated environmental assessments and reporting, within the broad framework of sustainable development goals and initiatives. A specific short-term objective is to support the implementation of decisions of AMCEN with respect to the Africa Environment Outlook (AEO) preparation process, while strengthening capacity for state of environment (SoE) reporting at the national and sub-regional levels.

Another short-term objective is to harmonise the information base and approaches to reporting on the various multi-lateral environmental agreements (MEAs) at the national level. Through partnerships and strategic alignments, the AEIN initiative will strengthen the capacities of African countries to generate a broader range of products and services to support integrated environmental management while at the same time, providing a harmonised and comprehensive information and knowledge base to support African countries in meeting their commitments and reporting requirements to the MEAs, funding agencies, and other partners.

In designing the AEIN to meet national needs, which in turn respond to AMCEN's requirements, due consideration was also given to making the initiative to provide information support for the implementation of the Environmental Component of the New Partnership for Africa's Development (NEPAD). In the longer term, AEIN will also support the implementation of NEPAD, as well as global initiatives that focus on sustainable development in Africa.

The AEIN initiative is a "*multi-stakeholder and partnership framework*". The basic concepts upon which it has been developed have been extensively discussed through consultations with many stakeholders, and have been endorsed by the AMCEN. The concepts have also received extensive political support from UN and other international organizations, donor agencies and other regional and international bodies and partners.

2. Objectives of the meeting

As a multi-tier network the ultimate goal of AEIN would only be achieved through effective collaboration among many varied initiatives, projects and programmes of various partners, and other windows of opportunity. The *framework* approach advocated

is to ensure that there is synergy among these activities. Therefore the success of AEIN will depend, to a very large, on open and full cooperative arrangements with key partners involved in environmental information management and related systems development in the region.

The development of partnerships, networking and collaborative mechanisms are central to meeting this challenge. The goal of the stakeholders' meeting was to explore with potential partners ways to pursue a common approach in this regard. Specific objectives of the meeting were:

- Review the AEIN framework concept, and provide inputs for the draft implementation strategy and guidelines;
- Build consensus on key policy and strategic AEIN issues, related to the overall implementation approach, principal products and services, and institutional networking and partnerships;
- Elicit inputs from key relevant partners with regard to the harmonization and streamlining of efforts, and establish linkages to on-going programmes and activities with a view to building synergy;
- Make recommendations for the establishment of the International Steering Committee for the AEIN programme.

Networking and agreement on appropriate institutional arrangements as well as mechanisms that could serve to align on-going initiatives into comprehensive and harmonised approaches would be sought.

The meeting also served a formal launching of the AEIN implementation process.

3. Meeting format

A consultative work-session format was adopted. The agenda for the meeting is indicated in Annex 1.

There were several presentations (see Annex 3) to provide the appropriate context for deliberations. The presentations covered the following:

- The AMCEN context and mandate for the AEIN
- An evolution of UNEP's capacity building activities with respect to integrated environmental assessment and reporting
- An overview of the AEIN framework and implementation strategy
- Brief presentations on partner initiatives relating to AEIN

Detailed discussions were held in three focus groups dealing with the following:

- Data issues
- Networking and institutional arrangements
- Capacity building (institutional support) and training

The meeting was under the overall leadership and guidance of the Director of UNEP's Regional Office for Africa, who chaired the plenary sessions. Deliberations were guided by two facilitators.

4. Participation

There were 37 participants drawn from various organisations, including universities, regional institutions, non-governmental organisations, and the private sector (Annex 4). Participants were selected on the basis of their long experience in environmental information systems development in Africa, as well as the potential for the establishment of partnerships.

5. Focus Groups Discussions

The Kampala Declaration by AMCEN specifically calls for the establishment of the AEIN “to promote access to, and harmonization of data in the Africa region and act as a basis for tracking environmental changes using quantitative indicators focusing on national needs”¹. In order to keep this “core mandate” in perspective, the focus of implementation of AEIN within UNEP will be on integrated assessment and reporting. The immediate objective will be to build capacity for the development and management of *core datasets for integrated environmental assessments and reporting* at the national level, while supporting and catalysing *institutional networking and capacities* related to the management of data and information at the sub-national, national, sub-regional, and regional levels. In order to do this AEIN proposes the establishment of a *Data Development and Exchange Platform* as the basis for networking and collaboration.

The first phase of AEIN implementation (2003 – 2004) is essentially a proof of concept. One basic assumption regarding the phasing of AEIN implementation is that some elements of the programme may already be in place in several countries. On this basis the implementation strategy for Phase 1 assumes that *some data exists in some form, somewhere*. The focus of activities in Phase 1 therefore is to test this assumption, while implementing pilot activities with respect to networking, development of the common data repositories, prototype products, information services, and the appropriate tools and methodologies to support AEIN activities. These activities are aimed at building a stronger foundation for the *production of the next AEO*.

The goal for Phase 1 will be *building capacity for organising, managing data in a networked environment and the analytical processes to support the AEO preparation*. Specific objectives will be:

- To develop an AEO Data Compendium from existing data sources
- To quantify environmental changes, support observed trends, characterise emerging issues, and to assess impacts of such changes on human vulnerability using hard data and indicators;
- Strengthen data networking at the sub-regional level.

¹ 9th Session of the African Ministerial Conference on Environment, Kampala 1-5 July, 2002

It is intended that a set of prototype products will be developed and used to engage decision makers in discussions (through Executive Seminars and workshops) at the sub-regional level to "test" their response to such products, and fine-tune the products more to suit their needs, or to develop new product concepts, policy-relevant applications, and services. A comprehensive "roll out" plan for the respective sub-regions will be prepared at the end of the phase.

Against this background, the focus groups were tasked to discuss the broad context for the SoE and AEO reporting processes, and the specific ways by which AEIN implementation will support the process. Discussions were guided by basic questions/issues such as:

- What are the issues relating to *core data sets* that need to be addressed?
- What organisational and institutional framework would be appropriate to deal with the coordination and implementations processes?
- What capacity would be required, and how would capacity needs be met?

Members of the groups would incorporate perspectives, experience and best practices from their individual organisations into the groups' deliberation in addressing the issues, as well as how they could contribute to the implementation of AEIN as currently defined. They were expected to explore the possibilities for collaboration and harmonisation of efforts and approaches. How could AEIN benefit from what their organisations are doing, so that in the near future all stakeholders could benefit from integrated capacity building efforts, harmonised databases, etc.? How could national partners respond to AMCEN's need in terms of AEO more efficiently? More importantly what would be the incentives for national partners to belong to such a network, in terms of their respective national-level priorities?

Group leaders were assigned, but other participants had the choice which focus group(s) they would prefer to join.

6. Focus Group Reports

6.1 Data Issues

The group on data issues and processes discussed what constituted "data", reviewed the data categories used for the AEO/GEO processes, and examined related issues.

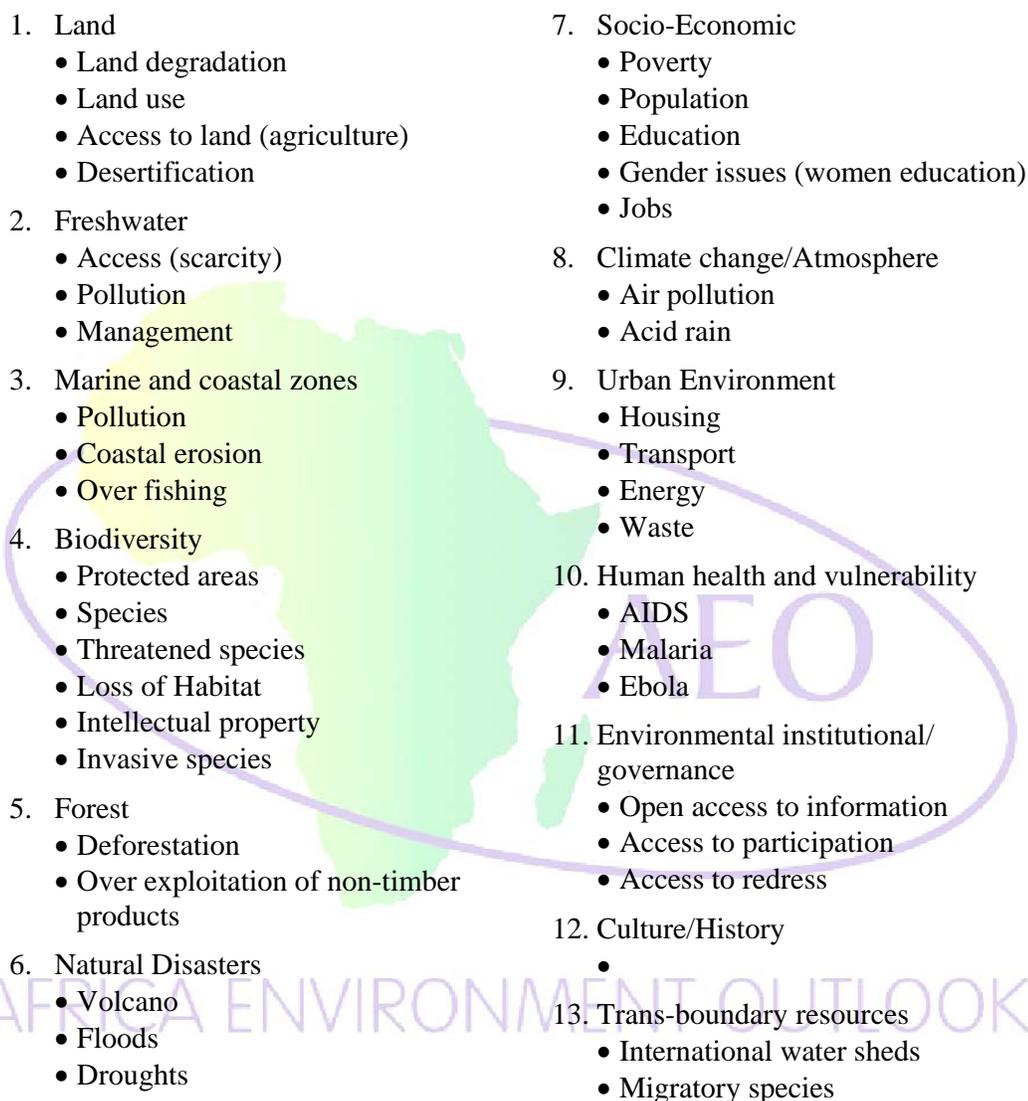
The group identified two broad data types/sources:

1. Statistics
 - Tabular data
 - Reports
 - Analyses
 - Databases
2. Geo-spatial data
 - Geo referenced digital data
 - Flat map files (JPEG, GIFF etc.)

- Hand drawn maps

They pointed out that discussions about data types in Africa should include “authorised” (i.e., official) as well as “unauthorised” (or “unofficial”) data.

On the basis of AEO/GEO processes 9 categories (thematic areas) were identified:

- 
1. Land
 - Land degradation
 - Land use
 - Access to land (agriculture)
 - Desertification
 2. Freshwater
 - Access (scarcity)
 - Pollution
 - Management
 3. Marine and coastal zones
 - Pollution
 - Coastal erosion
 - Over fishing
 4. Biodiversity
 - Protected areas
 - Species
 - Threatened species
 - Loss of Habitat
 - Intellectual property
 - Invasive species
 5. Forest
 - Deforestation
 - Over exploitation of non-timber products
 6. Natural Disasters
 - Volcano
 - Floods
 - Droughts
 7. Socio-Economic
 - Poverty
 - Population
 - Education
 - Gender issues (women education)
 - Jobs
 8. Climate change/Atmosphere
 - Air pollution
 - Acid rain
 9. Urban Environment
 - Housing
 - Transport
 - Energy
 - Waste
 10. Human health and vulnerability
 - AIDS
 - Malaria
 - Ebola
 11. Environmental institutional/ governance
 - Open access to information
 - Access to participation
 - Access to redress
 12. Culture/History
 -
 13. Trans-boundary resources
 - International water sheds
 - Migratory species

Several constraints and issues, in terms of lack, relating to data processes were identified:

On content:

- Economic valuation of resources (analysis)
- Time series trends
- Other valuation of resources
- Continuity of data, time series
- Data does not exist
- Appropriateness

- Definitions of terms within the data collectors
- Core data

On data documentation

- Metadata (Documentation)
- Comparability across countries
- Usefulness of data
- Data sources – some sources are more reliable than others
- Classification systems

On legal/regulatory frameworks

- Cooperation from institutions to validate the data available
- Sharing water data across the countries (ground water scarcity issues in North Africa);
- Accessibility to data (for instance public and media access due to secrecy laws)
- Acceptance of data coming from international institutions

On data management

Lack of:

- Archiving of data

On institutional capacity

Lack of:

- Equipment (hardware, software, staffing, budget, institutional support, etc.)
- Capacity for the collection of the information (Do national level institutions collect the data themselves, or do they prefer international institutions to collect the data for them?)

On technical capacity

Lack of:

- Analytical capacity
- Policy analysis
- GIS analysis

The group made the following *suggestions and recommendations* to address these constraints and issues:

1. Different **data tools** have been developed and used to organise databases for the preparation of AEO sub-regional reports, e.g., Northern Africa and Western Africa, Southern Africa. It was *recommended* that the sub-regional groups should get together to harmonise these **data tools** and, if possible, agree upon one harmonised tool which would:
 - Allow experts to organise the data in a logical framework;
 - Allow for documentation and metadata;
 - Allow for statistical data viewing;

- Encourage development of a standard set of national and sub-regional indicators;
- Allow for analysis: *country comparisons, data source comparisons, time series, spatial analysis, integrating statistical and GIS data* (assuming same base data);
- Allow for development SOE reporting;
- Allow for training at national, sub-regional and regional levels;
- Allow for updating: *can use Internet surveys and other mechanisms.*

The tools can be used to develop mechanisms to disseminate information such as national, sub-regional (*Northern Africa data portal hosted by CEDARE*) and regional (*UNEP.Net*) data portals. They can also be used for planning purposes and policy presentations.

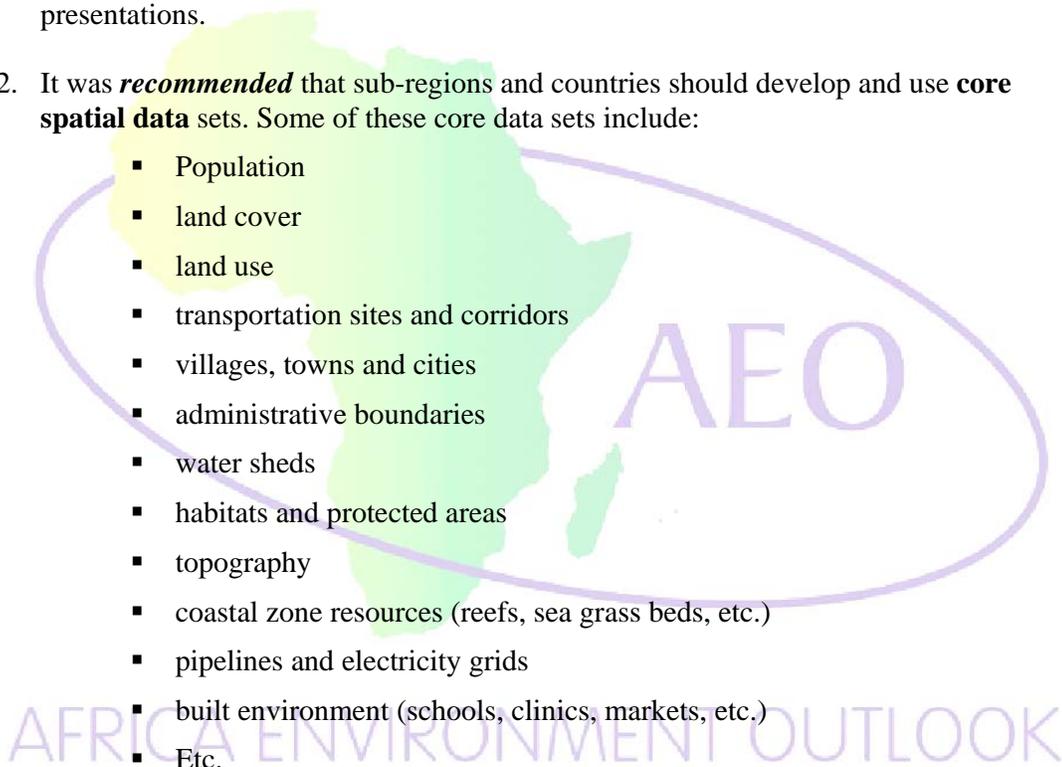
2. It was **recommended** that sub-regions and countries should develop and use **core spatial data** sets. Some of these core data sets include:

- Population
- land cover
- land use
- transportation sites and corridors
- villages, towns and cities
- administrative boundaries
- water sheds
- habitats and protected areas
- topography
- coastal zone resources (reefs, sea grass beds, etc.)
- pipelines and electricity grids
- built environment (schools, clinics, markets, etc.)
- Etc.

This list and other core data sets can be developed from the following sources:

- EIS-Africa position paper for WSSD;
- Global data working group report (December 2001);
- GEO core data sets working group report in Thailand, 2000;
- Sub-regional and national spatial data recommendations;
- Country-At-A-Glance (e.g., Ghana)

3. There should be an assessment of the status of national **spatial data infrastructure**. This can be done in a number of different ways such as:



- Drawing upon national information and communication infrastructure policies;
- Making use of existing available assessment reports such as the one done for IGAD.

Assessments can be conducted by the use of surveys, questionnaires, interviews, and site visits. Results from spatial data infrastructure assessment would include the level of technical capacity, a list of major projects, a list of key applications, and the availability of core data sets at different scales, etc. Some of the key African spatial data will reside on servers located in Africa (at national, sub-regional and regional level). Considerable amounts of spatial data will reside on servers outside of Africa.

4. There is the need for a list of **indicators** for each of the major topics to be covered in the next AEO reports. The process of developing **indicators** from data would involve the following:
 - Assessment of available indicators for key subjects by nation and sub-region;
 - Assessment of available data to build the indicators/indexes;
 - Development of the missing data;
 - Development of the new agreed upon indicators.
5. With respect to **inventorying and cataloguing** of data the group *recommends* the following:
 - Every sub-regional Collaborating Centre should update its statistical and spatial data inventory;
 - Every sub-regional Collaborating Centre should work with countries to update their statistical and spatial data inventories;
 - Every sub-regional Collaborating Centre should select national thematic experts/institutions to help identify data and studies;

An effort should be made to explore how the new organization for Global Spatial Data Infrastructure (GSDI), the UN Statistical Office, and other comparable organizations can support inventory and metadata at national and sub-regional level.

6. With respect to **custodianship and networking** the following were *recommended*:
 - Establish a forum within the sub-region to discuss spatial data issues;
 - Sub-regional institutions should develop a data exchange policy.
7. With respect to **data quality (fitness for use)** the group *recommends* that:
 - There should be a data working group within AEIN;
 - Quality assessment and quality control should include the following elements:-
 - Credible and/or recognised source
 - Extent of missing data
 - Clear definitions — “truth-in-labelling”

- Source agency
 - Methodology
 - Data quality
 - Independent scientific quality
 - Comparison with data sets
 - User feedback
 - Outlier detection — “if it looks wrong, it likely is”
 - Internal consistency
 - Documentation and meta-data available (minimum set; see UNEP/DEWA’s “Global/Regional Data Portals, Standards and Tools” meeting, Geneva, 17-19 December 2001)
8. With regard to data/information **accessibility** the group recommends the promotion of open access laws to environment information, as well as easy access of data/information through Internet, CD-ROMS, publications, and the media.

The data group suggested the need to work through benchmarks and targets for major environment and development global goals as applied to Africa. The hypothesis is that while the indicators may be the same the targets most will be different. The groups also suggested working through one of the Millennium Development Goals (MDGs) to identify how selected indicators and data would be compiled. The group’s hypothesis is that some of these indicators and data will be different for the African situation.

6.2 Institutional framework and issues

The focus group on institutional framework and issues reviewed the organisational and institutional framework indicated in the AEIN proposal document (page 28), i.e.:

- a) The physical network structure
- b) Sub-regional coordination mechanism
- c) Provision for an international steering committee
- d) Coordination and management framework
- e) Partnerships
- f) National implementation framework, comprising:
 - National steering committee
 - Forum of stakeholders
 - National node
 - Technical committee
 - Working groups
 - A network of data centres
 - Provision of technical services

The group's discussions were on the basis of the following questions: Was this structure workable? If yes, could it be further enhanced? If not, how could it be restructured to make it more appropriate? Against this background the group proceeded to identify structures and mechanisms to deal with the process of AEIN coordination and implementation, with a focus on the production of the next AEO as the 'end point' of the process.

The group identified two broad categories of issues at the international, regional, sub-regional, national levels, either as pre-requisites or evolving, or both:

Coordination and management issues:

- policy guidance (formulation, decision making, etc.) is a pre-requisite
- Effective *partnership arrangements* between the core group on one side, and technical services on the other (pre-requisite as well as evolving)
- *Communication, synergy, and harmonization* among complementary initiatives (TOR is a pre-requisite for the international steering committee)
- *Network development* and associated issues (evolving)
- A *monitoring and evaluation* system with progress indicators (e.g., for reviewing institutions) are a pre-requisite, and will also evolve over time
- *Establishment of [new] structures* where necessary, as the need arises
- *Facilitation* or implementation support (evolving)
- *Liaison with donors* and resource mobilization (evolving)
- *Consensus development* (evolving)

Implementation issues and actions:

- Identification of effective partners/collaborating centres at the different levels – relevant mandate, needs assessment
- Implementation of a broad range of issues related to data and indicators (access policies, data distribution policies, harmonization, quality control issues, standards, etc.);
- Provision of technical services
- Monitoring and evaluation of the implementation process and documenting lessons learned
- Outreach and awareness raising & education/advocacy
- Capacity development in environmental assessment – from use of indicators to scenarios, etc. (cap to analyse and produce useful information, e.g., thematic maps)
- Support efforts to facilitate the establishment of appropriate legal framework, e.g., policy change or development in support of environment information management
- Indicator development or review of existing indicator initiatives
- Network development (dialogue, communication, consensus development)

- Development of harmonized methodologies, procedures and tools for environmental assessment and reporting
- Leveraging resources
- Sustainability at the different levels – financial, material and human resources
- Production of AEO and related products (national and sub-regional SOEs, thematic reports, etc.).

The group then proceeded to assign responsibility for the above functions or for dealing with the issues raised (see Table 1 below, *Institutional framework and issues*). The group agreed that the proposed structure (page 28) seems to be adequate as a fairly good entry point for now. The over-arching principle is that the AEIN will use existing structures at the different levels.

6.3 Capacity building

The group on capacity building and training identified several issues, needs and solutions at the various levels of implementation, based on the experience of producing the first AEO (see Table 2 below, *Report of Focus Group on Capacity Building and Institutional Support*). The group was of the view that the scope of the first AEO was influenced, and perhaps limited, by the availability of data and capacity. This approach is limiting because it is not driven by a rigorous quantitative assessment and analysis. The group identified interventions that would ensure that data availability and capacity would not limit the next AEO. The suggested interventions included the provision of guidelines to implementing agencies (which would also aid in the harmonization of reports to be aggregated), technical training at national level, especially through sub-regional workshops (with the added benefit of stimulating sharing of experiences by national agencies) and the establishment of networking mechanisms, providing for regular feedback and exchange of ideas, amongst role players at the various levels.

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Table 1: Institutional framework and issues

Function	Level	Responsibility
<i>Coordination and management</i>		
Policy guidance for the process of establishing an operating network	International, regional, sub-regional national: <ul style="list-style-type: none"> • policy guidance • monitoring of progress • liaison of donors • guide operation of partnerships 	Steering committee under AMCEN leadership revolving around Africa (representation will include donors). Technical committee at sub-regional level. The Programme Coordination Unit will coordinate, but should be able to support/facilitate technical backstopping activities that arise within AEIN and thus provide the link between the sub-regional technical and international steering committees.
Network development	International, regional, sub-regional, national	AMCEN, sub-regional centres, in-country coordinating structures (lead agency)
Partnership arrangements	Regional, Bi-lateral, sub-regional, national, sub-national	
Communication		
<i>Implementation</i>		
Identify effective partners	National	In-country coordinating structures (lead agency)

Table 2: Report of Focus Group on Capacity Building and Institutional Support — Issues, needs and associated solutions

Issues and needs	Solutions: How to address the needs	Solutions: Who can help?
NATIONAL LEVEL:		
Technical issues:		
<ul style="list-style-type: none"> • Data acquisition and management (core data, sources, classification, archiving) • Identification & selection of indicators, data collection • Data analysis (time series, evaluation, environmental economics) • Scenario development 	<ul style="list-style-type: none"> • Networking • Training of trainers (through Universities, Centres of Excellence, in-country or regional institutions, private sector & NGOs) • Training in data analysis 	<ul style="list-style-type: none"> • UNEP & partners • National focal points, <ul style="list-style-type: none"> ▪ Through Universities, Centres of Excellence, in country or regional institutions, private sector and NGOs) ▪ with assistance from existing initiatives e.g. ESRI/Sambus project, GEF funded Capacity 21, FAO AFRICOVER, SETES, SANTREN • Sub-regional centres: RCMRD, RECTAS • Drawing on expertise and support outside Africa, e.g. ESRI, ITC, EROS Data Centre
<ul style="list-style-type: none"> • ICT needs (hardware, software, institutional support, Internet) 	<ul style="list-style-type: none"> • Provision of Equipment/ facilities • Training in hardware, software, Internet, web systems, geo-information & other applications 	<ul style="list-style-type: none"> • Private Sector • Regional centres & national centres
<ul style="list-style-type: none"> • Reporting & streamlining of reporting • Communication & outreach • Conversion of data to information 	<ul style="list-style-type: none"> • Training workshops at sub-regional level to train the trainers and harmonise approaches 	<ul style="list-style-type: none"> • UNEP to coordinate, regional centres
<ul style="list-style-type: none"> • Emerging issues and early warning 	<ul style="list-style-type: none"> • Provision of existing materials on early warning information, technology and training in assessment 	<ul style="list-style-type: none"> • IPCC, ISDR, WMO, WHO, FEWS

Managerial issues:		
<ul style="list-style-type: none"> Data documentation (metadata), archiving, access & rescue 	<ul style="list-style-type: none"> Provision of guidelines and quality control measures for data management Provision of tools for data documentation, archiving, cataloguing 	<ul style="list-style-type: none"> UNEP, EDC
<ul style="list-style-type: none"> Reporting & streamlining of reporting Understanding reporting objectives/requirements 	<ul style="list-style-type: none"> Provision of guidelines for reporting Sub-regional Workshops to standardize SOE reporting and communication and managing the AEO process 	<ul style="list-style-type: none"> International, regional, sub-regional and national agencies to provide training
<ul style="list-style-type: none"> Communication & outreach 	<ul style="list-style-type: none"> Training in communications skills to different audiences 	
<ul style="list-style-type: none"> Coordination & Networking 	<ul style="list-style-type: none"> Training and networking skills development Establishing mechanisms for regular communication between organizations in support of network development 	<ul style="list-style-type: none"> National nodes to feed into regional networks like EIS-AFRICA, and to act as national networking focal points
<ul style="list-style-type: none"> ICT budget & maintenance Project management 	<ul style="list-style-type: none"> Training in project management Financial support and financial management 	
Legal <ul style="list-style-type: none"> Legal frameworks Public access to information Validation of data 	<ul style="list-style-type: none"> Sharing of best practices and experiences between institutions on the way they have evolved and function 	<ul style="list-style-type: none"> National focal points, through networks UNEP (particularly the sharing of Infoterra and ENRIN experiences) ECA/GSDI/EIS-Africa's SDI implementation guide
Policy <ul style="list-style-type: none"> Policy analysis/ strategy development Scenario development Using information in policy making & decision making Emerging issues and early warning 	<ul style="list-style-type: none"> Training through sub-regional workshops Sharing of experiences through workshops and personal contact Workshops for decision makers Developing summaries for policy makers 	<ul style="list-style-type: none"> UNEP can coordinate

SUB-REGIONAL LEVEL:		
<ul style="list-style-type: none"> • Co-ordination & sharing information 	<ul style="list-style-type: none"> • Networking • Institutional support: hardware, software, budget, specialized staff, 	<ul style="list-style-type: none"> • UNEP and CCs • Sub-regional institutions & national centres of excellence • Technical Service Centres
<ul style="list-style-type: none"> • Information integration 	<ul style="list-style-type: none"> • Establishment of expert groups • Sub-regional training and report development workshops in harmonization and integration of national SOE reports into a sub-regional report 	
<ul style="list-style-type: none"> • Using information in policy making 	<ul style="list-style-type: none"> • Workshops 	
REGIONAL LEVEL:		
<ul style="list-style-type: none"> • Co-ordination 	<ul style="list-style-type: none"> • Adequate staff and resources at regional level for sub-regional coordination and management of the AEO process. • Process management skills ensuring sustainability and timeliness of the AEO process 	<ul style="list-style-type: none"> • UNEP • AMCEN
<ul style="list-style-type: none"> • Sustainability 	<ul style="list-style-type: none"> • Monitoring and evaluation of regional, sub-regional, and national progress to identify capacities and needs 	
	<ul style="list-style-type: none"> • Management of feedback process to contributors, on an ongoing process to ensure continued buy-in 	

AFRICA ENVIRONMENT OUTLOOK

6.4 Plenary Discussions

Much of the discussions following the group reports focused on networking and institutional arrangements since many issues raised by the various groups had institutional and organisational dimensions. Thus there was considerable discussion on the proposed institutional arrangements for the effective implementation of AEIN. While the basic coordination, management and implementation structure suggested by the AEIN proposal was accepted, in principle, participants expressed the need for further elaboration and clarification of relationships and roles at the national, sub-regional and regional levels. It was also pointed out that the fact that AMCEN is the apex body to which AEIN is intended to respond, as well as the role of UNEP, should be indicated in the structure.

It was also necessary to acknowledge the fact that there could be other structures at the national as well as the sub-regional levels which respond to various other initiatives, such as national committees and technical service centres that would become part of permanent committees for Spatial Data Infrastructure (SDI) in Africa, or other such processes. Such recognition would reinforce the synergy between AEIN and other national structures that are envisaged to contribute to and support the implementation of AEIN. A more explicit linkage to national SDI initiatives, without presuming that the AEIN focal point (National Node) institution would necessarily play the lead role, would be important.

The over-arching principle, with respect to institutional arrangements and networking is that, to the extent possible, AEIN will build upon existing structures at the different levels. In the short-term the focus is to create a synergy using these structures to support the production of targeted outputs, making sure that the process takes into account existing initiatives, and that to the extent possible the appropriate linkages to the outputs of AEIN are clear.

In the longer term the challenge would be to ensure that the various networks are properly integrated in a much larger context. It was emphasised that AEIN launches a process that aims to provide a framework for responding to the many national and regional sustainable development initiatives, as well as the national reporting requirements in the context of the various MEAs. This makes the AEIN concept more complicated. AEIN takes the view that the only place where integration and synergy among the different networks can actually take place is at a national level. Thus networks should be encouraged to work together at a national level. In this respect two aspects of the AEIN framework should be recognised. The first one deals explicitly with the AEO process for which AEIN has a specific “mandate” for. The other aspect is the broader development process for national frameworks for information management from which the national state of environment reporting processes, as well as other sustainable development initiatives, would draw support from.

6.5 Linkages with the Conventions and Other Groups

Cognisance was taken of a decision from the 6th Meeting of the Conference of Parties of the Convention on Biological Diversity (April 2002 in The Hague, The Netherlands) with respect to regional and sub-regional mechanisms for implementation of the Convention. Paragraph 11 of COP Decision VI/27(B) on the operations of the Convention acknowledges the important role that regional and sub-regional mechanisms and networks play in promoting the implementation of the Convention. The decision

- “a) Requests the Executive Secretary to identify, assess and report on the potential of existing regional and sub-regional instruments, institutions, networks and mechanisms in various regions as a basis for enhancing the implementation of the Convention ...
- “b) Encourages Parties to strengthen regional and sub-regional cooperation, enhance the integration and promote synergies with relevant regional and sub-regional processes;
- “c) Invites all donors and institutions in a position to do so to support the work of existing regional coordination mechanisms and the development of regional and sub-regional networks or processes, as appropriate;
- “d) Invites Parties, Governments, and relevant organizations to strengthen their existing regional and sub-regional mechanisms and initiatives for capacity-building and to contribute inputs regarding their experiences into the wider assessment process....”

The decision could be seen as providing the necessary authority and framework within which AEIN could work with and support the work of the CBD and other conventions in the region. It was suggested that the AEIN initiative should initiate direct detailed consultations and dialogue with the CBD Secretariat to explore way forward. The same could be done for the United Nation Framework Convention on Climate Change, and the Convention to Combat Drought and Desertification, to mention a few. There is clearly a need to work together to make it easier for national institutions to provide inputs required for reporting processes. The meeting was informed that there would be a meeting in Nairobi at the end of March focusing on clearinghouse initiatives. This would provide an opportunity to begin discussions how AEIN could work with the CBD. It would be ideal if the CDB reporting process could use the same AEIN sources of information, the same “core” data, and the same institutions.

The use of the same data and institutions is fundamental to the AEIN concept and framework, and these are some of the areas and practical ways in which AEIN could collaborate with convention and other key partners. It was suggested that the terms of reference of the International Steering Committee could include a responsibility for consultation with the Conventions in order to harmonise information management and reporting approaches. New guidelines should be developed for the preparation of national reports in a manner that engender the creation of synergy. This would need coordination that is currently non-existent.

6.6 A note on the next AEO

Discussions were also held with respect to the date for publishing the next AEO. It was agreed that the next report will be prepared for the AMCEN Session in 2006, and would focus on the thematic areas and priority issues identified under the Environmental Component of NEPAD. This will also allow inputs from the report to be extracted for the next GEO report, due in 2007. It was agreed that in the interim AEIN implementation would focus on the development of relevant structures, mechanisms, and a series of intermediate products, which would ultimately feed into the 2006 report. These would include:

- A Data Compendium and related data products

- A catalogue of information needs and reporting requirements for the Conventions
- Updated sub-regional extracts of the AEO 2002
- AEO for the youth

A process to identify the key policy issues to be addressed by the AEO, as well as the indicators that would be used, has been initiated.

7. Conclusions and Recommendations

- a) The meeting recommended that AMCEN should ensure that responsive and functional national structures should be in place and empowered, in order for the AEIN to be successful.
- b) The meeting endorsed the proposed institutional framework for coordination and management, i.e.,
 - i) An International Steering Committee to oversee implementation
 - ii) Regional coordination and management by UNEP
 - iii) Sub-regional “clustering” for the purpose of coordination, using the existing network of GEO/AEO Collaborating Centres
 - iv) National implementation framework comprising
 - ♦ National AEIN node
 - ♦ National Steering Committee
 - ♦ Forum of Stakeholders
 - ♦ Technical Committee
 - ♦ Working Groups
 - ♦ A network of Data Centres
 - ♦ Provision of technical services by entities with capacity to do so
 - v) A network of partners to support or implement different aspects of the AEIN framework
- c) The International Steering Committee will provide *policy guidance, monitoring of progress, coordinating with conventions and other initiatives, and provide liaison with donors.*
- d) It was recommended that members of the International Steering Committee would be drawn from institutions including the following:
 - i) AMCEN (mandatory)
 - ii) NEPAD (mandatory)
 - iii) The African Union (mandatory)
 - iv) A representative of the donors (mandatory)

- v) African Development Bank
 - vi) A representative of the sub-regional and regional groupings e.g. SADC, IGAD, UMA, ECOWAS, ECCAS, IOC, etc.
 - vii) Conventions, other international groupings, or UNEP as “coordinator”
 - viii) A representative of the UN agencies (e.g. FAO, UNDP, ECA)
 - ix) A representative of the private sector
 - x) Representative from national level (on rotational basis)
- e) It was recognised that the International Steering Committee would from time to time require technical advisory services. It is therefore recommended that there should be an ad-hoc Technical Working Group, convened as required, to provide this service. Membership could be drawn from institutions including the following:
- i) African universities
 - ii) Technical Regional Centres
 - iii) EIS-AFRICA
 - iv) Media representative, e.g., Network of African Environmental Journalists
- f) In order to establish linkages with the conventions and other groupings (with respect to national obligations for reporting) there should be consultations and dialogue with the CBD and UNFCCC to explore ways of working together. In the immediate term, AEIN should initiate policy- and technical-level consultations and dialogue with the convention Secretariats and, using the existing relevant legal authorities or decisions, to develop practical approaches for working together focusing on the following areas:
- ♦ National reporting processes
 - ♦ Thematic reporting
 - ♦ National Biodiversity Strategies and Action Plans
 - ♦ Information exchange (Clearinghouse Mechanisms)
 - ♦ Integrated assessment and reporting (AEO and Global Environmental Outlook report)
 - ♦ Data issues
 - ♦ Institutional framework issues
 - ♦ Capacity development.

Similar consultation processes should be undertaken with the UNCCD and other AEIN key partners including, UNECA, WRI, FAO, UNDP, etc., to develop mutually supportive activities, synergies and collaboration in the region.

- g) AEIN should work within existing structures/initiatives, partnerships and networks where necessary (more comprehensive lists to be supplied by the groups). It should also make use of existing capacity within Africa, e.g.:

- ♦ USGS/EDC capacity building activities (e.g., through EMIS, EINFORM, FEWS NET, etc.)
 - ♦ EIS Africa
 - ♦ SISEI initiative by UNITAR
 - ♦ Geographic Information Support for Sustainable Development (GISSD) by USAID
 - ♦ Environmental Monitoring and Information System (EMIS) by USAID
 - ♦ African Information Society Initiative (AISII)
 - ♦ SADC Integrated Development GIS initiative
 - ♦ TPN4
 - ♦ And many more...
- h) The meeting commended the high quality of the AEIN document both as a framework and a working document. It recommended that the document should be finalised bearing in mind the recommendations and conclusions from the meeting.
- i) It was recommended that the development and implementation of a communication and/or “influence” strategy should be incorporated as part of Phase 1.
- j) The meeting suggested criteria for selection of countries for the first phase:
- i) Governments of candidate countries should, through AMCEN, show commitment to the principles of AEIN, e.g., by the establishment of a policy framework;
 - ii) There should be commitment from the countries;
 - iii) There should be a balance in the capacity levels, i.e., countries have capacity, are on their way there, and no capacity;
 - iv) There should be geographic balance in the selection;
 - v) There should be a high probability for showing concrete results by the end of Phase 1.

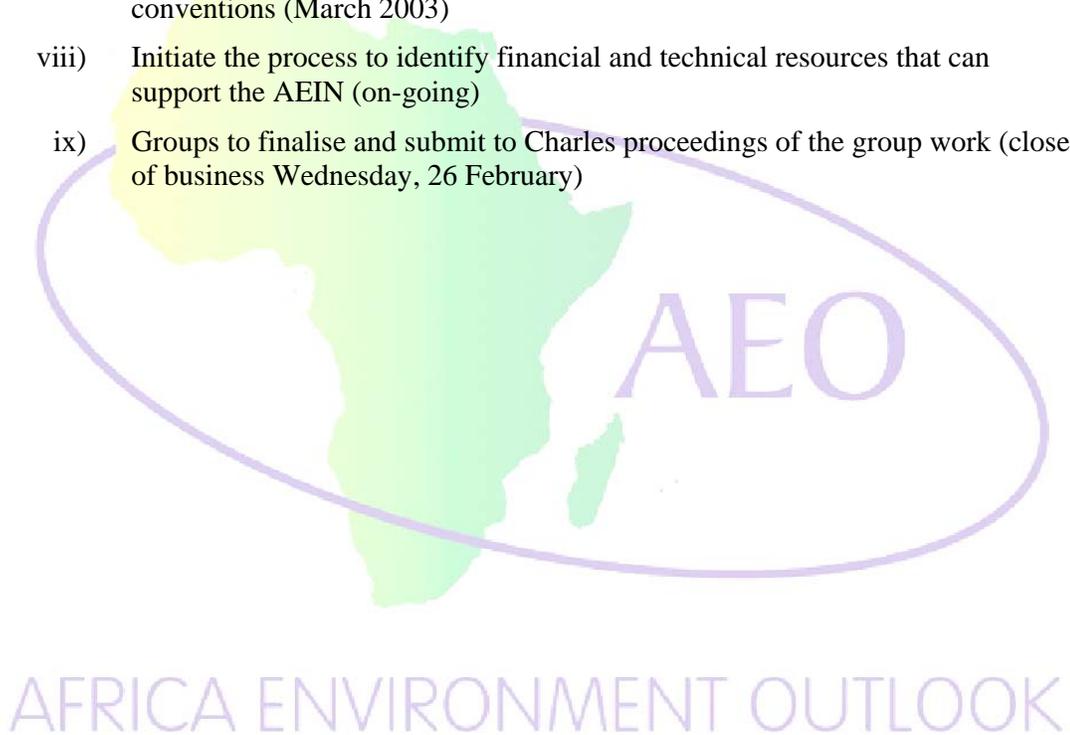
As a general principle the operation of the AEIN process should endeavour to strengthen weaker information structures and networks.

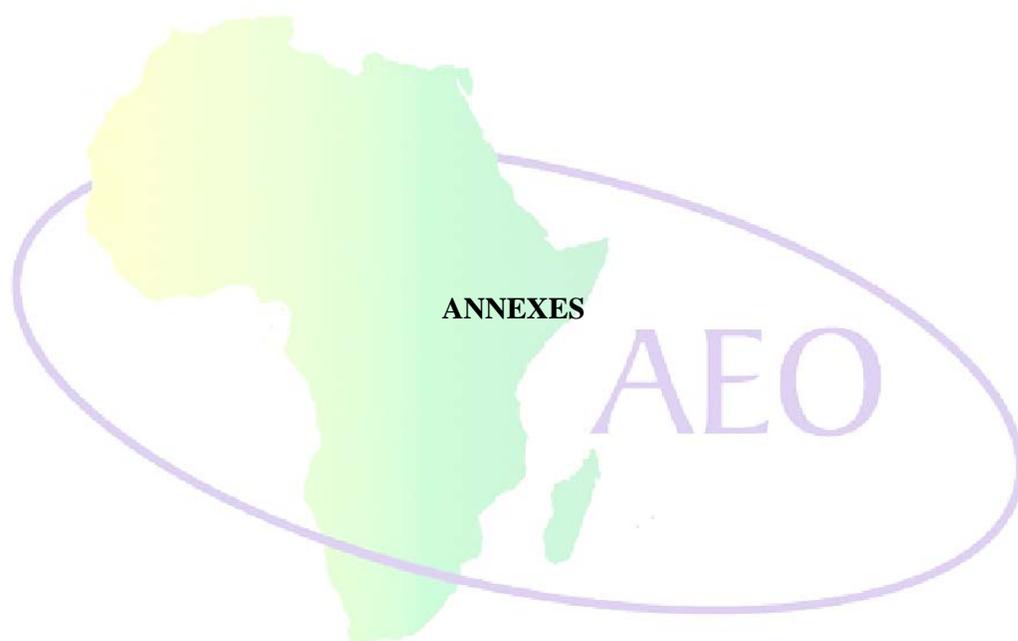
8. Next Steps

The overall goal is to build a “pyramid of activities” towards the preparation of the AEO for 2006:

- i) Finalisation of the workshop report in time to brief the AMCEN bureau on the 10th March 2003
- ii) Develop AEIN implementation guidelines (by the 30th June 2003)

- iii) Develop a communication and/or 'influence' strategy for wide spread dissemination of the AEIN concept/strategy (*Dan Tunstall for input*) (June 2003)
- iv) Finalise the AEIN project document, including translation to French (July 2003)
- v) Initiate activities to follow up recommendations arising from this meeting (now!)
- vi) Intermediary products should be produced between now and 2006, e.g., data compendium, human vulnerability/environmental change report, AEO for youth, indicator framework, policy briefs for AMCEN 2004, needs assessment reports, etc. (on-going to June 2004)
- vii) Initiate the AEO-2 process – scoping, definition of core datasets, indicator development, etc. and ultimately capture the elements for reporting under conventions (March 2003)
- viii) Initiate the process to identify financial and technical resources that can support the AEIN (on-going)
- ix) Groups to finalise and submit to Charles proceedings of the group work (close of business Wednesday, 26 February)





AFRICA ENVIRONMENT OUTLOOK

Annex 1

Africa Environment Information Network Stakeholders Meeting

24 – 26 February 2003

Court Classique Hotel, Pretoria, South Africa

Agenda

23 February: Arrival and check-in at Court Classique Hotel, Pretoria

24 February:

0800 – 0900: Registration

0900 – 0930: Opening Session

- Welcoming remarks by EIS-AFRICA
- Opening remarks by the Director Regional Office for Africa, UNEP
- Statements by Norway and Ireland
- Official opening by the Minister of Environment and Tourism, RSA

0930 – 1000: Introduction of workshop agenda (Alaphia Wright/Jacob Gyamfi-Aidoo)

1000 – 1030: Tea Break

1030 – 1230: Presentations

- Brief presentation by the Ag. Chief, Early Warning Branch
- Overview of the AEIN framework document (Jacob Gyamfi-Aidoo)
- AEIN implementation strategy (Charles Sebukeera)
- Brief presentations on partner initiatives.

1230 – 1400: Lunch Break/Administrative issues

1400 – 1500: Discussions

1500 – 1530: Introduction to group work and group formation

1530 – 1600: Tea Coffee Break

1600 – 1700: Break-out sessions

25 February:

0800 – 0830: Administrative announcements
Review of progress from break-out sessions

0830 – 1000: Break-out sessions (cont'd)

1000 – 1030: Tea Break

1030 – 1230: Break-out sessions (cont'd)

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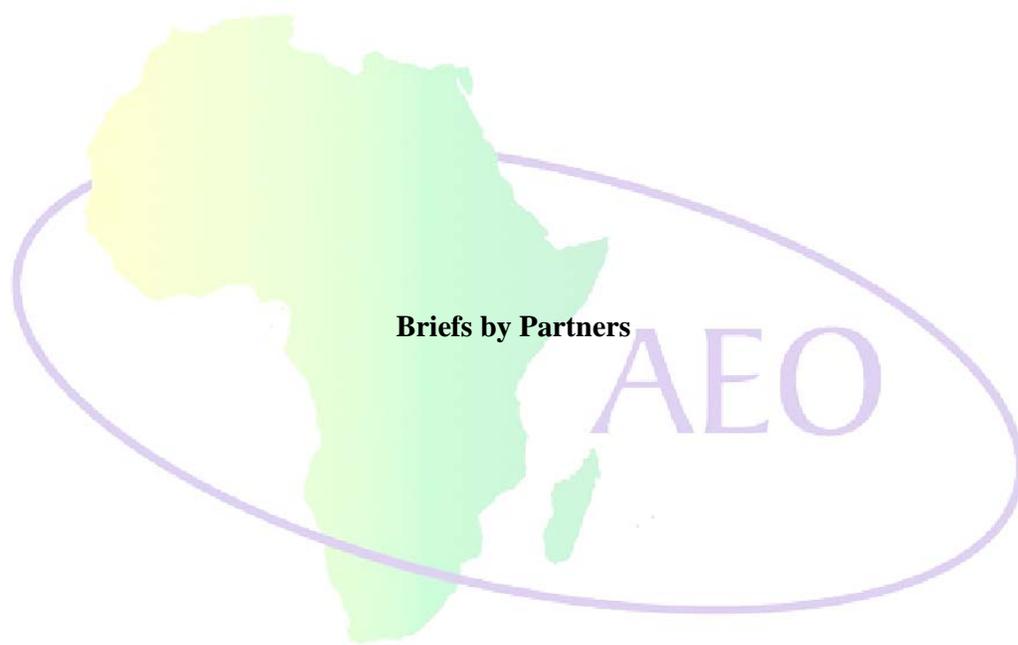
- 1230 – 1400: Lunch Break
- 1400 – 1530: Break-out sessions (cont'd)
- 1530 – 1600: Tea Coffee Break
- 1600 – 1700: Group Reports

26 February:

- 0800 – 0830: Administrative announcements
- 0830 – 1000: Discussions and recommendations
- 1000 – 1030: Tea Break
- 1030 – 1230: Establishment of Steering Committee
- Closing Session
- 1230 – 1400: Lunch



AFRICA ENVIRONMENT OUTLOOK



AFRICA ENVIRONMENT OUTLOOK

Annex 2

SHORT BRIEF BY THE UNITED NATIONS ECONOMIC FOR AFRICA ON ACTIVITIES IN THE FIELD OF GEOGRAPHIC INFORMATION THAT ARE RELEVANT TO AEIN

AEIN Meeting, 24 - 26 February 2003

ECA and Geoinformation

ECA is the regional arm of the United Nations mandated to support the economic and social development of its 53 member States, foster regional integration, and promote international cooperation for Africa's development. Established in 1958 and based in Addis Ababa, Ethiopia, ECA is one of the five regional economic commissions under the administrative direction of UN headquarters. It reports directly to the UN Economic and Social Council through the Conference of African Ministers Responsible for Economic and Social Planning, and convenes a number of intergovernmental organs and Committees.

Since its inception, the Economic Commission for Africa has been implementing activities in this field of Geoinformation, initially through its former Cartographic and Remote Sensing Unit of the Natural Resources Division, and now through the Geoinformation team of the Development Information Division, in its efforts to assist the African countries to improve the management and their natural resources and the environment, as part of the Commission's overall mandates.

Assessment of status of the technology, studies on the implementation of GIS, co-organization and organization of workshops, seminars and ad-hoc expert group meetings to streamline regional policy on geoinformation, exchange of information, promoting cooperation, advisory services to member States and sub-regional groupings, are among a few of these activities.

A substantive activity is the organization, every two years, of the Committee on Development Information (CODI), which has subsumed, the functions of the joint Conference of African Planners, Statisticians, Population and Information specialists, and those of the United Nations Regional Cartographic Conferences for Africa (UNRCCA). It also ensures the implementation of the African Information Society Initiative (AISII). CODI is a legislative body of the Commission where policy and technical issues are addressed. Delegates make recommendations and adopt resolutions on the various components of information for development on behalf of their governments. It is open to observers who participate in the discussions and interact with officials from Africa, and lay down the foundations for further cooperation.

Current focus

The implementation of the work programme in the domain of Geoinformation currently focuses on three fronts: promotion of and capacity-building in modern Geoinformation resources management, in particular Spatial Information Infrastructures (SDIs) at regional and national level; in awareness raising in geo-spatial technologies applications; and in developing an in-house facility that would make possible the search and discovery of spatial data collections on Africa for use by all researchers and decision-makers, and that would provide member States with means to publicize their spatial data holdings.

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More specifically, in the next two-three years, the emphasis will be placed in promoting and assisting the establishment of broad based national coordinating bodies for the collection, management and dissemination of geographic data, and in the development of systems and services to enable planners and all members of the society to access, discover and explore geographic data holdings and ensure their inclusion in the decision making process.

The Geoinformation team will build upon existing and new partnerships to leverage ECA resources. It will strengthen its collaborative relations with regional and international bodies as well as with sister institutions of the UN system with convergent objectives, to mutually support activities of common interest.

Recent, current and future activities include the following:

On advocacy, consensus building, and launching partnerships, ECA provided in the last twelve months substantive technical support to various national and regional workshops and stakeholders forums on different aspects of SDIs (Eritrea, April 02; Nairobi, August 02; Zambia, June 02; Durban, November 02; Windhoek, December 02; Abuja, February 03). In May 03 it will organize in Addis Ababa, in cooperation with partners, a Regional Symposium on Spatial Data Infrastructure preceding the third meeting of the Committee on Development Information (CODI-3). The main purpose of the meeting is two fold: It intends to activate dialogue among African stakeholders about national spatial data infrastructures (NSDIs) with a view of getting NSDIS solidly on the agenda of governments and help countries to develop standards for SDIs. Most importantly, the meeting will be used to form a Permanent Committee on Spatial Data Infrastructure for Africa, as directed by the second meeting of the Committee on Development Information (CODI2, September 2001). We consider crucial, for the success of the symposium, that African and Global initiatives that are working towards the same goals, such as EIS-Africa, AEIN, GSDI, fully join hands with ECA in its organization and have a joint symposium, ensuring complementary of efforts and best use of resources.

On capacity building, ECA co-organized with the Office for Outer Space Affairs (OOSA), a regional conference on Space Technologies for Disaster Management (Addis, June 02). The meeting provided a forum to discuss the potential benefits of using space technology to support disaster management activities in Africa, and most importantly to develop a regional plan of action that would coordinate the efforts of the various institutions interested in forming a cooperative network and that would lead in the near future to pilot projects that incorporate and test the use of space-based solutions for disaster management in the region. ECA also intends to organize two additional sub-regional awareness and training workshops on SDIs later this year, in principle concurrently with other major regional meetings: ICA, Durban, August; Africa GIS, Dakar, October or FIG Commission 3, Morocco,?). A workshop on ISO TC-211 standards for managers will be organized following CODI-3.

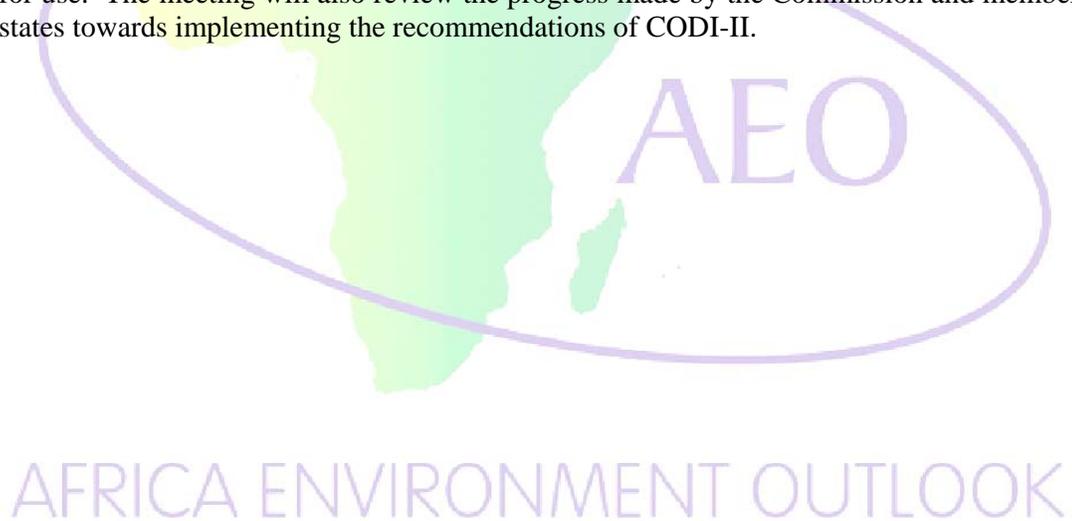
Concerning policy analysis, capacity building and information dissemination, a publication in the form of a practical guide Africa to support developers of SDIs in Africa is being compiled as a joint cooperative effort of GSDI, EIS-Africa and ECA. The guide is targeted to all those that have a key role to play in promoting, adopting, developing or implementing spatial information infrastructure in their home countries. The first draft chapters were recently reviewed by an-hoc group of experts who met the

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first week of February in Addis for this purpose. A comprehensive version will be submitted to CODI-3.

Databases and technical material. With the financial support of the Government of Korea, a standard-based Geo-information clearinghouse gateway is being set up, with the main objective to deliver geoinformation tools, techniques and products to member States. The project will facilitate the search and discovery of spatial data collections on Africa, including those held outside Africa, for use by all researchers and decision-makers working on issues related to the continent. It will provide *country spaces* to member States to publicize their metadata holdings. A database on the status of geographic Information management and utilization in Africa will be compiled and a Survey is currently underway.

Finally, the Commission is actively engaged in the preparations of the *Third Meeting of the Committee on Development Information*, to be held from 12 to 15 May at ECA in Addis, with the theme “Information for Governance”. It is expected that this edition of CODI will increase the understanding of the central role of information in implementing programmes designed to improve governance. Following on this increased understanding, we expect to improve the acceptance that sustained resourcing and maintenance of information services, systems and institutions are needed to make relevant information available and accessible to decision makers and the general public in a form that is ready for use. The meeting will also review the progress made by the Commission and member states towards implementing the recommendations of CODI-II.



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AFRICA ENVIRONMENT INFORMATION NETWORK: THE AFRICAN UNION PERSPECTIVE

Introduction

Ready access to availability, pertinent and current environmental information on Africa will undoubtedly be essential for the African Union to effectively discharge its mandate in the very near future, when the Union becomes fully operational. As the apex political and developmental policy institution of the African continent, the African Union would need to closely network with institutions and agencies on the continent, and abroad, to acquire relevant environmental information and data to inform its decision-making and planning process. While the Commission of Union is itself not an environment information-generating entity, some of its implementing organs, such as the Scientific and Technical Research Commissions (STRCs), would have valuable environment and natural resources information that could be shared with other stakeholders on the continent. The commission however could provide a vantage conduit for disseminating information to its member States. In 1999 the Environment Division of the then Organization of Africa Unity attempted to set up an Environment Information System (EIS). The process however stalled as a result of the restructuring of the OAU and its subsequent transformation into the African Union.

Environment Information Management within the AU

Having been launched as recent as July 2002, and being currently heavily engaged in activities related to organizational set-up, along with infrastructural development, the African Union, as at now, has no established environment information management system. However initiatives that are underway will make it possible for the AU to participate in an African Environment information Network. Some of these initiatives are described below.

The African Union Website

An African Union website (*africa-union.org*), exist. Attempts are currently being made to make the website more efficient and user-friendly. The Commission is currently considering proposals to create a webPage for each of its technical directorates. This would provide the Directorate of Rural Economy and Agriculture, which has an environment and natural resources mandate, to create an environment information management dialogue box in its webPage. Since the website would be open for general access, it would enable the AU to receive and send out information on environment and natural resources developments on the continent.

The AU Intra-Net

The AU is in the process of installing an inter-connected computer system, which will link not only the computers at commission, but also link with all African Diplomatic Missions in Addis Ababa, the various organs to be located in different parts of the continent as well as the Regional Economic Communities. Once the system is completely installed it will provide immediate possibility for individuals connected to the system to send information directly to an officer connected to it. Again this offers the opportunity for exchange of information between officers, especially were information require

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immediate action. The possibility to directly access the website/page will facilitate the posting of such information for public consumption as necessary.

AU Early Warning System

The Political Directorate of the Union, which deals with conflict resolution on the continent, is also looking into the possibility of setting up an early warning system, with focal points in all the sub-regions, and linkages with the RECs. Conflict-related environmental matters will likely be part of the network that might eventually be established. The Focal points would be able to receive and forward environmental information of emergency nature to the Commission for the latter's action. Unlike the AU website and intra-net, this early warning system may take some years before it becomes fully operational. Once it becomes operational however, it should, in principle, be possible to link the system to the Unions environment information system/web page and to forward information emanating from the system to other stakeholders as necessary.



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WRI ACTIVITIES IN SUPPORT OF THE AFRICAN ENVIRONMENTAL INFORMATION NETWORK

Dan Tunstall, World Resources Institute
February, 2003

Indicators:

1. Coral Reefs

“Reefs at Risk in Southeast Asia” was released by WRI in 2002. The report was prepared in collaboration with UNEP’s World Conservation Monitoring Centre, ICLARM (The World Fish Center), and the International Coral Reef Action Network (ICRAN). The report uses a series of indicators to model the potential threats to coral reefs. Key indicators include: coastal development, marine-based pollution, inland pollution and sedimentation, destructive fishing, and over-fishing. We are currently working on a comparable review for the Caribbean, with the Indian Ocean to follow. See www.wri.org.

2. Forest Monitoring and Global Forest Watch

WRI in collaboration with the University of Maryland is preparing a report on Global Forest Cover, a review of forest extent (and tree cover) using the new NASA MODIS (Moderate Resolution Imaging Spectroradiometer) instrument. The report should be available on the web by mid-summer. Data will be available by country. The website for the Modis data is <http://modis.umiacs.umd.edu/vcfdistribution.htm>.

Global Forest Watch is an international network of non-governmental, academic, and research organizations that provides timely, reliable, and accurate information on forests and forest ecosystems to ensure public understanding and informed decision-making. To date, GFW has produced reports on Gabon and Cameroon. Studies on the Congo and the Democratic Republic of Congo are to follow. These reports and online data are used to assess illegal logging and accountability within the governments and logging sectors. See www.globalforestwatch.org.

3. Water Resources

WRI in collaboration with the International Water Management Institute (IWMI), the Center for Environmental Systems Research, University of Kassel, Germany, and the IUCN-The World Conservation Union, have completed a first technical study, *“Putting the Water Requirements of Freshwater Ecosystems Into the Global Picture of Water Resources Assessment.”* A poster showing the map results will be presented at the World Water Forum in Japan, in March, 2003.

WRI recently completed a study on, *“Status and Trends of Inland Water Biological Diversity”* for the Convention on Biodiversity. The paper includes status and threats to microorganisms, plants, invertebrates, fish, amphibians, reptiles, and water birds.

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4. Poverty Mapping

At WSSD, WRI and UNEP GRID/Arendal released, “*Where are the Poor? Experiences with the Development and Use of Poverty Maps.*” The report highlights lessons learned from 14 country case studies. Included are studies from South Africa, Madagascar, Burkina Faso, Malawi, and Mozambique. WRI is continuing to work with UNEP/GRID-Arendal, the Earth Institute at Columbia University, the World Bank, and UNDP to develop and promote the mapping of poverty in all countries. See www.wri.org and www.grida.no for PDF versions of the report.

5. Poverty and Ecosystem Goods and Services

WRI in collaboration with experts in Uganda, Kenya, IFPRI, and ILRI are beginning a project entitled, “Developing Opportunities for Poverty Reduction through Spatial Analysis of Ecosystem Services”. The key activities will include the analysis of ecosystem goods and services with the state of poverty at sub-national levels. With the use of these indicators, we should have a better chance to overcome existing limitations of environmental analyses that often tell us little about poverty impacts. These indicators should ultimately lead to more integrated local, national, and international planning frameworks, improved monitoring and assessment of poverty and ecosystem condition, and greater recognition and better valuation of ecosystem services.

6. Drylands and Ecosystems

“*Drylands, People, and Ecosystem Goods and Services: A Web-based Geospatial Analysis*” prepared by Robin White and Janet Nackoney will be released on WRI’s website in March, 2003. This report contains more than 40 global maps of the world’s drylands overlaid with information about population, water resources and watersheds, biodiversity, carbon, agriculture, forests, and other important information that helps to make the case that drylands are viable resources if managed for ecosystem goods and services. This report follows a recent WRI policy brief, “*An Ecosystem Approach to Drylands: Building Support for New Development Policies*” by Robin White, Norbert Henninger, and Dan Tunstall, which concludes that an ecosystem approach is needed to drive new policies towards the management of drylands.

7. Drylands: Rain Use Efficiency

This project, carried out in support of the Millennium Ecosystem Assessment, is just starting. The intent is to develop an indicator of the condition of dryland ecosystems using rain-use-efficiency (RUE) as a measure of change in vegetation cover and potential land degradation over time. The RUE indicator will be tested in southern African countries in collaboration with colleagues working on the sub-global assessment for the SADC region.

8. Drylands and Wetlands

The project is also being undertaken in collaboration with the Millennium Ecosystem Assessment. The intent is to assess the condition of wetlands in dry basins, with an emphasis on areas of rapid change in wetland extent. Possible basins to examine include the Okavango and the Chad.

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9. Mining and Critical Ecosystems

WRI staff is involved in the development of potential indicators of stress on ecosystems, based on mining activities. Two countries being studied include Papua New Guinea and the Philippines.

10. Environmental Governance: The Access Initiative

WRI staff, in collaboration with NGOs from eight other countries, developed a set of indicators which can be used to measure how well the public is able to participate in environmental decisions. Three broad types of indicators were developed and tested: those dealing with access to information; those dealing with access to participation; and those dealing with access to justice.

In the area of access to information, four types of information and reports were tested: information about day-to-day environmental quality (drinking water, air quality); information about environmental trends (state of environment reports); information about pollution at industrial facilities (pollution compliance records from industrial sites and national inventories of industrial emissions); and information about emergency situations and risks (information about large-scale, highly visible accidents, and information about localized accidents at private industrial facilities).

The results of the eight country surveys have been summarized in the latest edition of the World Resources Report and in a separate publication, "*Bridging the Gap*". For more information about The Access Initiative and the follow-up work on the Partnership for Principal 10 see www.accessinitiative.org.

Assessments and Reporting

1. World Resources Report

The World Resources Report is prepared every two years in collaboration with UNEP, UNDP, and the World Bank. A policy-makers summary of the latest edition is available, "*A Guide to World Resources: 2002-2004: Decisions for the Earth: Balance, Voice, and Power*." The full report will be available in May, 2003. The latest edition contains a detailed review and assessment of environmental governance, along with 50 pages of data tables highlighting the latest key indicators of sustainable development. See www.wri.org/wri.

2. EarthTrends Website

EarthTrends is an easy to use, no-cost interactive website, providing statistics, maps, tables, country profiles, and feature articles on sustainable development. It includes more than 600 variables for all African countries. Profiles are available for all African countries as well. Data are continuously updated. Also included are maps by ecosystem and all major watersheds. See <http://earthtrends.wri.org>.

3. Water e-atlas

The Water e-atlas CD-ROM will be released at the World Water Forum in Japan in March. It contains a number of global maps on water resources and uses, as well as three

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maps for each watershed. All major African watersheds are included. The long term goal of this project is to be able to link the global maps to the website of every single major watershed in the world. In the process, we will work to standardize a set of key water resource and water quality indicators.

Collaborators include: IWMI, IUCN, and WRI.

Best Practices and Capacity Building

1. WRI/USAID Information Working Group for Africa

WRI, in collaboration with USAID's Africa Bureau and Bureau for Economic Growth, Agriculture, and Trade, supports African institutions and others seeking to strengthen the capacity to develop, share, and use geospatial and other information for decision-making. Current projects include: outreach for *GIS: Supporting Environmental Planning and Management in West Africa* by Andre Bassole, Jake Brunner, and Dan Tunstall; preparation of an EIS-Africa position paper by Elizabeth Gavin, "*Geo-Information Supports Decision-Making in Africa*"; preparation by Frank Turyatunga of a case study on integrating PRA and GIS to support local level environmental planning in Uganda; and development of a background paper on Data Policy (for U.S. AID and other organizations) by Kara Page, Dan Tunstall, Paul Bartel. WRI and the IWG also participate in the work of EIS-Africa.

2. CountryTrends Websites

Following work on EarthTrends, WRI is proposing to work with two African partner countries to develop a comparable integrated database at the country level. This is a pilot project, which if successful, could result in a much larger project to support the development and use of statistical data for numerous countries and sub-national administrative units throughout Africa.

AFRICA ENVIRONMENT OUTLOOK

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Presentations

1. Africa Environment Information Network — Background and Concept
by Dr. Sekou Toure, Director, UNEP Regional Office for Africa
2. [Overview of UNEP–DEWA information networking activities]
by Norberto Fernandez, Acting Chief, Early Warning Branch, DEWA
3. Africa Environment Information Network — An Overview
by Jacob Gyamfi-Aidoo, Consultant
4. Strategy for the Implementation of the Africa Environment Information Network
by Charles Sebukera, Programme Officer, UNEP/DEWA
5. Convention on Biological Diversity — Information Activities
by Kagumaho Kakuyo, Secretariat of the Convention on Biological Diversity
6. Realising a framework for capacity building in integrated environmental
assessments and reporting in Africa
7. Possible synergies between the United Nations Framework convention on Climate
Change (UNFCCC) and the Africa Environment Information Network
By Phillip Weech, UNFCCC Secretariat
8. IC GeoNet Prototype, by Etienne Louw, GISCOE/ESRI
9. UNDP's initiatives on environment information system (EIS) in Africa
by Joseph Opio-Odongo, Environmental Policy Advisor, BDP/UNDP
10. Réseau thématique sur le suivi écologique, la cartographie des ressources
naturelles, la télédétection et les systèmes d'alerte précoce dans le contexte du
programme d'action régional de lutte contre la désertification en Afrique
by Mamadou Fofana, Consultant
11. Some environmental information initiatives in Southern Africa
by Clever Mafuta, Deputy Head of Programme, SARDC-IMERCSA, and Craig
Schwabe, Human Sciences Research Council, South Africa
12. UNEP/GEF Medium-Sized Project on Development & Implementation of
Environment Initiative of NEPAD
by Dr. Sekou Toure, Director, UNEP Regional Office for Africa

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AFRICA ENVIRONMENTAL INFORMATION NETWORK 24 – 26 FEBRUARY 2003 PRETORIA, SOUTH AFRICA

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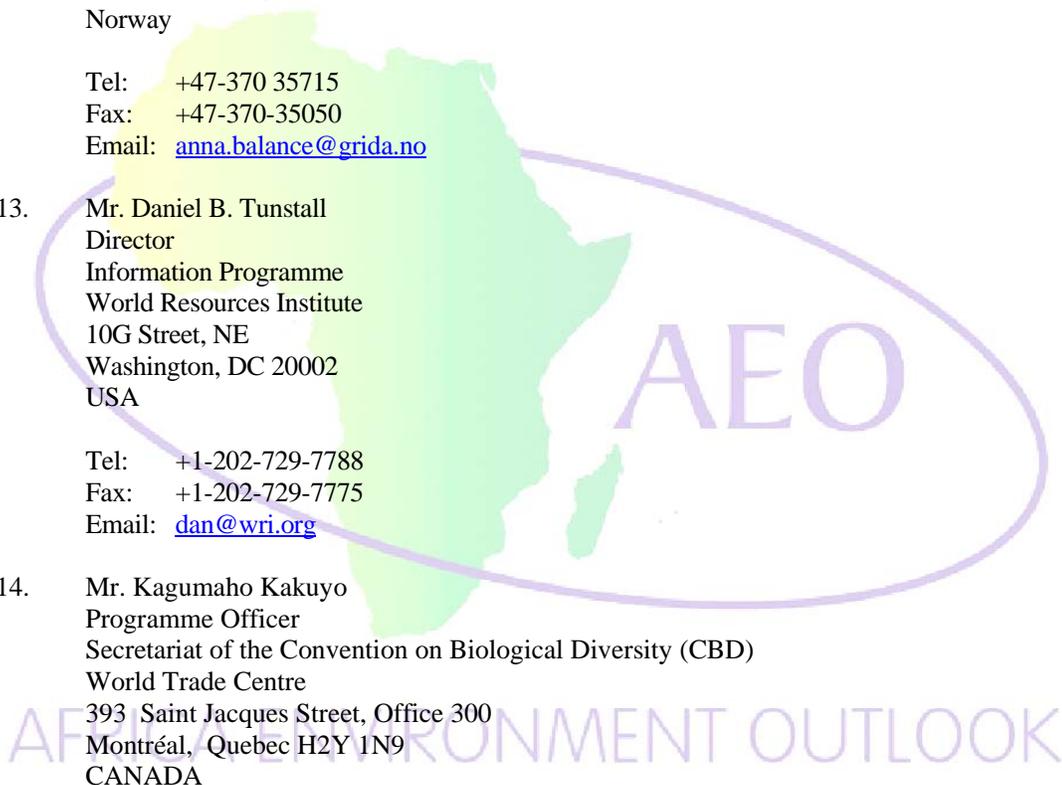
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