First meeting of the Sub-Committee on Geoinformation Committee on Development Information

REPORT

Economic Commission for Africa Addis Ababa, Ethiopia 28 June-1 July 1999

Sub-committee on Geo-information

1. The first meeting of the sub-committee on Geo-information was held at Headquarters of the Economic Commission for Africa (ECA) in Addis Ababa, Ethiopia, from 29 June to 2 July 1999.

2. Representatives from the following member countries attended the sub-committee meeting: Botswana, Burundi, Cote d'Ivoire, Ethiopia, Ghana, Kenya, Lesotho, Libya, Madagascar, Namibia, Nigeria, Republic of Congo, South Africa, Sudan, United Republic of Tanzania, Tunisia and Zambia.

3. Observers from the following sub-regional and regional institutions were represented: Association of African Universities (AAU), African Organizations for Cartography and Remote Sensing (AOCRS), Regional Centre for Mapping of Resources for Development (RCMD), Regional Centre for Training in Aerospace Surveys (RECTAS), Lake Chad Basin Commission (LCBC), and the Programme for Environmental Information Systems (EIS) for Sub-Saharan Africa.

4. Also present were observers from the following national and international organizations, and the private Sector: University of Lagos, University of Lausanne, University of Hannover, University of Natal, United nations Environment Program (UNEP), United Nations Institute for Training and Research (UNITAR), World Meteorological Organization (WMO), International Development Research Centre (IDRC), International Society for Photogrammetry and Remote Sensing (ISPRS), German Society for Technical Cooperation (GTZ), International Cartography Association (ICA), International Institute for Aerospace Surveys and Earth Sciences (ITC), Sahara and Sahel Observatory (OSS), International Federation of Surveyors (FIG), The Krakow Surveying and Cartography Co., Intergraph, Leica, Aero-Sensing and Information Systems Services (ISS-Ethiopia),

5. The sub-committee elected the following officers:

Chairman: Cote D'Ivoire Vice-Chairman: Namibia Rapporteur: Tanzania

6. The subcommittee elected a technical working group for the preparation of resolutions. The working group consisted of the following members: Ghana, Lesotho, Tanzania, Tunisia, ECA, AOCRS and ISPRS.

MAJOR ISSUES ADDRESSED:

- 7. The following issues were discussed:
 - Progress reports by the following member States: Botswana, Cote d'Ivoire, Ethiopia, Ghana, Lesotho, Libya, Namibia, Nigeria, South Africa, Tanzania, and Tunisia.
 - training and capacity building
 - awareness raising of policy makers
 - data collection and standardization
 - data manipulation and utilization
 - development of global and national geospatial data infrastructure
 - cadastral and land information
 - commercialization aspects of geoinformation role of private sector in geoinformation
 - review of the terms of reference of the subcommittee on geoinformation
 - review of ECA work programme

RESULTS AND RECOMMENDATIONS

Review of the terms of reference of the subcommittee

8. Paragraphs 20 and 22 were amended and read as follows :

20. The sub-committee on geoinformation shall be the forum for high level representatives of ECA member States to discuss, share information and establish policies for the development and the use of geographic information, in particular it shall:

- (a) raise awareness on the benefits to be derived through the utilization of geographic information for socio-economic development,
- (b) promote its development and utilization in member States;
- (c) identify and raise awareness about priority issues in geographic information;
- (d) examine and review progress made by member States
- (e) facilitate capacity building with regard to spatial information capture, management, dissemination and utilization.
- (f) provide information, with partnerships, on recent and proven trends and present status of knowledge and advise on new and proven technologies and methodologies to improve spatial data collection and its processing into useful information for decision-making;
- (g) promote the development of methodologies and standards in these fields;
- (h) develop and support the establishment of national, regional and global geo-spatial infrastructures with the aim of facilitating integration of data and optimizing the use of resources.
- (i) identify, promote and support regional projects;
- (j) examine and provide principles regarding ownership, access to, custodial responsibilities and commercial aspects of spatial data, which will promote transparency and the flow of spatial data and information.
- (k) The sub-committee will liaise and coordinate its activities with other similar international, regional and sub-regional bodies, initiatives and conferences.
- (1) Promote networking among institutions and practitioners in geoinformation, and generate synergy at national level to facilitate its management.

22. Observers will and representatives of national, regional, subregional, international organizations, UN agencies, IGOs, NGOS, academia and research institutions, private sector and the industry, including producers and users of geoinformation; and the heads of the national agencies from non-African governments or their representatives.

Review of the ECA work programme in the area of geoinformation of the biennia 1998-1999 and 2000-2001

9. The subcommittee received and noted the respective work programmes.

RECOMMENDATIONS:

10. The sub-committee made the following recommendations:

E/ECA/DISD/CODI.1/46- Annex IV CODI-Geo report

Resolution 1. National Geo-Information Infrastructures

The ECA-CODI Subcommittee on Geo-Information

Recognizing

the importance of geo-spatial information as a backbone for planning, decision making and implementation of sustainable development as well as the need for food security, poverty alleviation, environmental monitoring and control and natural resources management.

<u>Noting</u>

The absence of a homogenous horizontal and vertical geodetic datum for Africa.

Urges that

- 1. African countries develop policies and strategies for the establishment of national geospatial data infra structures and build data bases which include multi scale geographically referenced core data to be used as foundation for a wide range of geo-information applications
- 2. as part of the national geo-information policy, national data standards are defined in line with regional and international parameters. In the interest of synergy well-coordinated efforts should be made to involve all stakeholders in particular the government, the private sector, the Universities and the NGOs, etc.
- 3. National governments are requested to transform their respective national datums to the world wide WGS84 and ITRS reference systems including the determination of the geoid.
- 4. The subcommittee on geo-information, in collaboration with AOCRS, RCMRD, RECTAS and other relevant institutions, establish mechanisms and standards to harmonize GPS data collection, processing, archiving and exchange for use by all African countries.
- 5. The sub-committee on geoinformation determine the most appropriate manner in which the African region participate in the Global Spatial Data Infrastructure.

Resolution 2 : Availability of spatial data and cost recovery

The ECA-CODI Subcommittee on Geo-Information

<u>Noting</u>

the investment value and the national benefits of spatial data

recommends

- 1. the creation, in each country, of mechanisms to make governments aware of the benefits and utility of geospatial data for socio-economic development
- 2. that national governments make significant investments in the acquisition of spatial data and recognize it as national asset, indispensable for sustainable development programs.
- 3. facilitate geo-information dissemination, through networking of expertise based on bilateral and multilateral partnerships, on recent trends and state-of-the art in the areas of data acquisition, -analysis, -management and -dissemination including best practices and methodologies.
- 4. that national geo-information bodies and/or providers including governments, the private sector and other partners contribute and identify sources of funding for geo-information production.

Advice governments

5. to develop policies which follow cost-recovery principle including the commerciali-zation of geoinformation products.

E/ECA/DISD/CODI.1/46- Annex IV CODI-Geo report

Resolution 3 Land – Information Management

The ECA-CODI Subcommittee on Geo-Information

recognising

the critical need for timely land information for decision-making, to address issues of poverty alleviation, food security and security of tenure for all, and noting the limited financial and human resources available to develop LIM as well as the general lack of policy in regard to land information

recognising furthermore

the monitoring, management and upgrading of informal settlements and customary tenure are essential components of the process of improving quality of life in Africa

recommends that

- 1. LIM systems should be designed in harmony with the national geo-spatial data infrastructure to increase the capacity to collect, interpret and apply information to establish trends and to assist decision-makers.
- 2. national stakeholders' for a should be set up to address the institutional linkages issues associated with an LIM system.
- 3. a Regional Forum should be established under the coordination of ECA to harmonize and work out a dynamic spatial data framework for cadastral and LIM systems at regional level, in liaison with similar LIS organizational structures at international level.
- 4. a pilot program/project(s) should be developed in the region to demonstrate the feasibility/ viability /replicability of a GIS/LIM system based on the visualization framework approach, accompanied by a cost benefit analysis.
- 5. national strategies are developed for the design and implementation of spatial data strategies for the monitoring and management of informal settlements and custumary tenure, in accordance with project based education and employment for assistants within the rural and informally settled communities.

Resolution 4 Capacity building

The ECA-CODI Subcommittee on Geo-Information

Recognising

Capacity building and education in Africa in the area of spatial data acquisition, modeling and visualization, is under severe pressure as a result of under-resourcing and lack of sufficient institutions and facilities at all educational and training levels

recommends that

- 1. a Center for Distance Learning is established through a network of African national and sub-regional institutions and Universities
- 2. a network of educational institutions and sub regional centers is established and an assessment of the major educational institutions in Africa is carried out.
- 3. joint research projects of African educational institutions in the areas of spatial data acquisition, modeling and visualization, and land management, are initiated. Such projects could also incorporate the expertise of existing or new partner institutions in other parts of the world.
- 4. existing short courses/workshops relevant to Geo-Information are reinforced and new ones introduced
- 5. two joint FIG, ISPRS, ICA, ECA and OACRS workshops or seminars (one for the franco-phone and one for the anglo-phone region) on GIS and Spatial Information Management to be organised in Africa in the biennium 2000-2001
- 6. relevant national Ministries as well as institutes of higher education are made aware of the relevance of Geo-information education for national development

E/ECA/DISD/CODI.1/46- Annex IV CODI-Geo report

Resolution 5 Establishment of a Standing Preparatory Working Group

The ECA-CODI Subcommittee on Geo-Information

Recognizing

the necessity to be more effective and responsive to the needs of member States, to ensure successful meetings and maintain continuity between meetings,

Decides

- 1. To establish a Standing Preparatory Working Group (SPWG) to: ensure continuity between meetings; set up the theme, agenda and background documents and format; consider special issues of the next meeting and follow up and report on the implementation of resolutions as well as on the progress made in the region.
- 2. This WG shall be composed by representatives of the various sub-regions, plus representatives of relevant sub-regional/regional organizations, and the private sector. The Chairman will be the Chairman of the Sub-Committee while ECA will ensure the secretariat. The work of the WG would be in close consultation with member States in each sub-region, and with an Advisory Committee of experts which would provide guidance to the Sub-Committee.
- 3. The Working Group for the period between the First and Second Meetings of the Sub-Committee shall be constituted by :
- Chairman : Cote d'Ivoire (West Africa)
- Tunisia (North Africa)
- Tanzania (East Africa)
- Democratic Republic of Congo (Central Africa)
- South Africa (Southern Africa)
- AOCRS, RECTAS, RCMRD
- EIS
- 4. The Standing Working Group will establish its own terms of reference as well as those of the Advisory Committee, and will select the members of the Advisory Committee, who will act in their personal capacities.

ADOPTION OF THE REPORT

11. The sub-committee adopted its report on Thursday 1 July 1999 at 20:15 hours