

**THE PROGRESS OF THE
IMPLEMENTATION OF PROPOSED
PROJECTS ON THE APPLICATIONS OF
GNSS IN THE MANAGEMENT OF
ENVIRONMENT AND NATURAL
DISASTERS.**

By

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Presentation Layout

- Introduction
- Progress
- Conclusion

1.Introduction

- Review upto 2003 provided in December 2003
- Only implementations observed in 2004 discussed
- The survey based on interment and personal communications and may not be exhaustive.

1.Introduction cont'd

- Proposed projects
 - GPS-Meteorology
 - Climate change
 - Mapping water resources
 - Disaster management(early warning and risk zone mapping)
 - Environmental information System
 - Human resource development and awareness raising etc

Relevant Implemented Activities

- Management of environment
 - UN/ESA/Sudan Workshop on the Use of Space Technology for Natural Resources Management, Environmental Monitoring and Disaster Management, Khartoum, Sudan, 4 – 8 April 2004

Relevant Implemented Activities cont'd

- **Application Of GIS And Remote Sensing For Conservation And Management Of Forests In Myanmar**-In Myanmar, GIS and Remote Sensing technologies are used in forest management, watershed management, desertification combat, biodiversity management, environmental monitoring and evaluation, anti-narcotic activities and so on. Involvement of private sector is very important for technology developments

Relevant Implemented Activities cont'd

- **Use of GPS and GIS in the monitoring of mountain glaciers and animal migration in eastern Africa-By Gordon Wayumba, University of Nairobi. Part of “Implementation of GCOS regional plan for enhanced climate change observation system in the Greater Horn of Africa (GHA) through Monitoring of the tropical mountain Glaciers; establishment of regional urban climate change monitoring framework; and development of a Regional Climate change data and information centre “**

Relevant Implemented Activities cont'd

- Motivation
 - Observed changes in the characteristics of the lakes dependent on the glaciers
 - The melting glaciers feed the lakes on which nomadic communities and wildlife depend eg Amboselli
 - Historical data indicates that the potentially dramatic changes in groundflow and vegetation in response to future climate change could adversely undermine game survival and permanently alter the cyclical recovery trends of the region's biocomplexity.

Relevant Implemented Activities

cont'd

- For wildlife migrations
 - Analyse the impact of land use and climate variability on the migration of wildlife.
 - Preliminary findings indicate that wildlife have distinct migration patterns for breeding and survival
 - Deviations from the normal patterns due to land use and extreme climate events lead to significant deaths among the animals.
 - Mapping land use and integrating it with climate analysis would contribute significantly to environmental management and wildlife conservation
 - Mapping the migration routes would help in establishing the deviations from the norm and causes.

Relevant Implemented Activities cont'd

- **Disaster management**
 - **Training Opportunity 2004**, GPS for Fire Management, Two Classes
Mammoth Cave NP: Kentucky, March 1-5, 2004,
Denver, Colorado: April 19-23, 2004
 - **UN/ESA/Sudan Workshop On The Use Of Space Technology For Natural Resources Management, Environmental Monitoring And Disaster Management**, Khartoum, Sudan, 4 – 8 April 2004

Relevant Implemented Activities cont'd

- **United Nations International Workshop on the Use of Space Technology for Disaster Management**, Munich, Germany, 18 – 22 October 2004
- **Seminar on the Use of Space Technology for Disaster Management: Prevention and Management of Natural Disasters** ,Algiers, Algeria 5/22/2005 - 5/26/2005

Conclusion

- The available information indicates GNSS continued to be used in the management of environment and natural disasters.
- A number of proposals remained unimplemented. The GNSS have a high potential in this area. Capacity building in this area is crucial for enhancing the use of GNSS in the management of environment and natural disasters.

Conclusion

- The use of GNSS would yield more benefits through an integrated approach of the various thematic areas.
- It is also proposed that an integrated project addressing priority areas in each thematic area be developed with the possibility to source funding.
- Efforts should be made to take advantage of existing facilities and relevant projects under implementation in various regions and relevant fields.

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