The Global Land Cover Network and the Relevancy of Harmonised Land Cover

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Introduction

- Land cover is an expression of human activities and as such changes occur with alteration in land cover.
- Land cover is a geographical feature which may form a reference base for applications ranging from forest and rangeland monitoring, production of statistics, planning, investment, biodiversity, climate change, to desertification control.

Why do we need standards for Land Cover?

Area estimates: 11 cover types, different global datasets

LCCL: what is it? ... some basic concepts

- Comprehensive methodology for description, characterization, classification and comparison of most land cover features identified anywhere in the world, at any scale or level of detail
- Created in response to a need for
  - A harmonized and standardized collection and reporting on the status of land cover
  - Availability of land cover data for a wide range of applications and users
  - Comparison and correlation of land cover classes between different systems/approaches

LCCL to ISO TC211

- LCCL is now an example of an evolving standard of ISO TC 211 - submitted by FAO (a Class A Liaison Member) - to become an ISO standard through a consensus building process
- Already an FAO/UNEP standard
- Critical importance of ISO process
Africover Project

- AFRICOVER-EA project has made available timely and location-specific land cover information for ten African countries
- Egypt, Sudan, Eritrea, Somalia, Kenya, Uganda, Tanzania, Rwanda, Burundi and the Democratic Republic of Congo
- Covering an area of over 8.5 million km²

Database Characteristics

- Homogeneous Cartographic Standards - WGS84 datum and ellipsoid, UTM projection, < 100 m planimetric accuracy
- Flexibility of the database - ability to map detailed inherent L.C. features of each single country maintaining at the same time a regional harmonization
- Multi-User Oriented
- Standardised & Unambiguous class definitions
- Easy accessibility and free dissemination
- Consistency - Production storage and distribution of the product
- Follows the same specifications in all countries
- Quality and reliability - same level of quality and thematic accuracy for each country

GLCN Initiative - Overview

- Common effort of FAO and UNEP to answer the need expressed by the international community for a global land cover standardized database
- Based on the recommendations of the Agenda 21 for coordinated, systematic and harmonized collection and assessment of data on land cover and environmental conditions, especially for monitoring purposes
- Driven by standards (classifications, geometric, thematic standards)
- Lead to development of a global harmonized land cover classification and mapping strategy, with the objective to provide directions, focus and guidance for harmonized land cover mapping and monitoring at national, regional and global levels
- This initiative has been launched at the conference Strategies for Global Land Cover Mapping and Monitoring held in Florence May 2002 during which a common final declaration (the Arimino declaration) was issued.

Building a Global Coalition - Partnership - capturing global diversity

- A number of initiatives are already in existence
- No single entity at national, regional or international level can undertake this task alone
- Added-value for synergy and harmonization

Key partners: governments, industry, academic institutions, in addition to operational programmes and organizations (Participating agencies in this workshop are invited to become active participants in this process and to become engaged as national and sometimes regional facilitators for implementation, outreach and standards adoption)