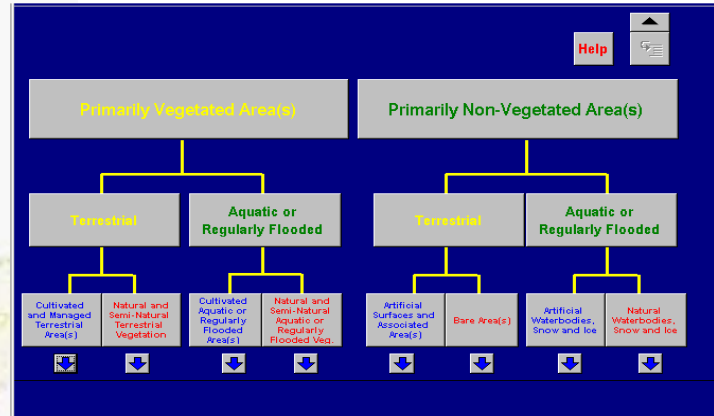


Land Cover Classification System

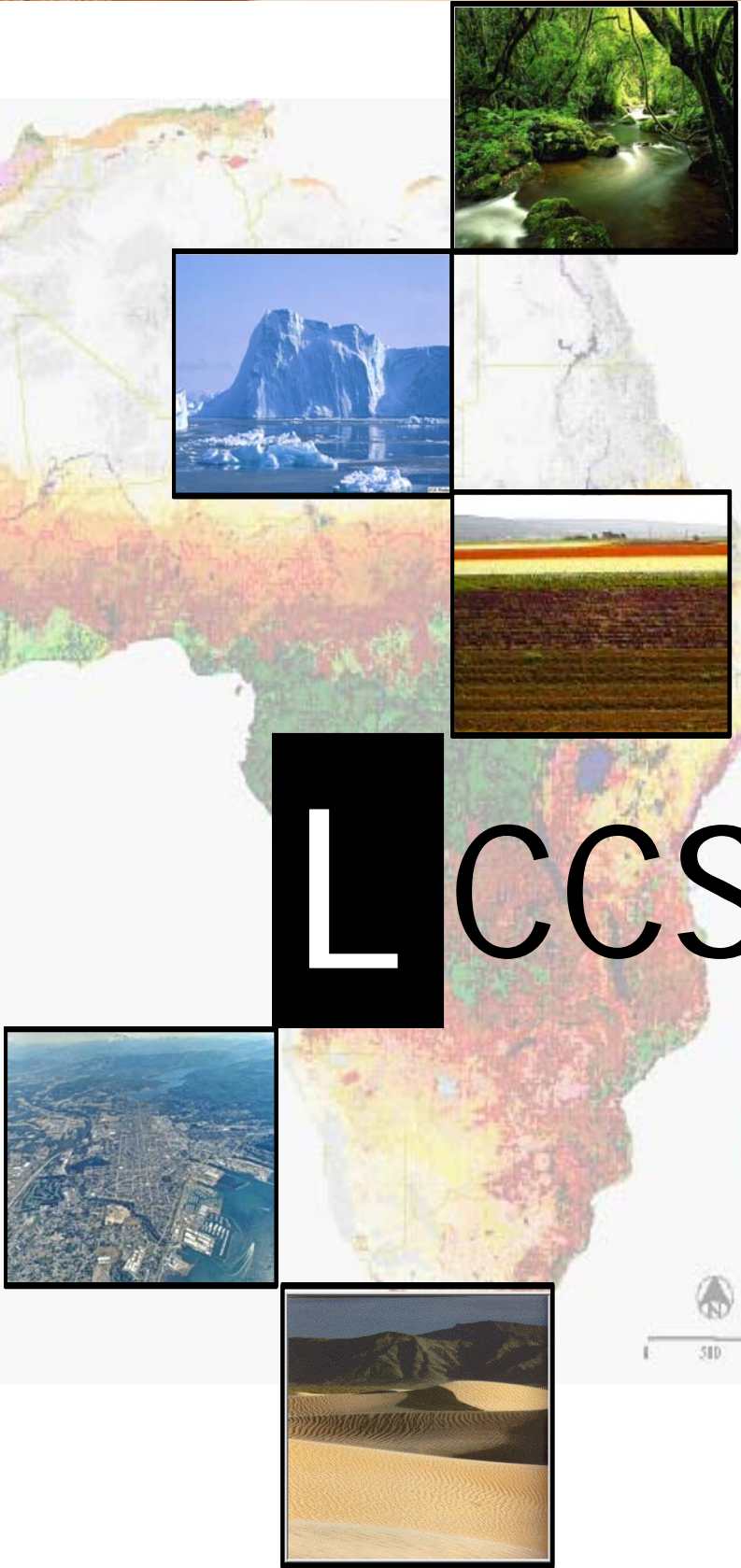
Land Cover Classification System

is a comprehensive, standardized a priori classification system. It is designed to meet specific user requirements and created for mapping exercises, independent of the scale and means used to map. LCCS supports all types of land cover monitoring and enables a comparison of land cover classes regardless of data source, sector or country.



LCCS

LCCS has been first introduced in the context of the Africover Programme of FAO (<http://www.africover.org>), then within the framework of the GLCN initiative. Founded on the success of the Africover programme, GLCN responds to the recommendations expressed by UNCED (United Nation Conference on Environment and Development, Rio de Janeiro 1992), Agenda 21 and the Convention on Biological Diversity, regarding the urgent need of co-ordinate, systematic and harmonized action on land cover data collection and environmental monitoring. LCCS is part of a number of software packages that support the new GLCN initiative and other national and regional mapping initiatives.



LCCS foundation

Adopted definition of Land Cover

LCCS defines land cover as the observed (bio)physical cover on the earth's surface. Land cover may include vegetation and man-made features as well as bare rock, bare soil and inland water surfaces.

Increased flexibility while maintaining mappability

LCCS promotes **flexibility** by describing enough classes that are representative of the real world, adhering to strict and unambiguous class boundary definitions, and being neutral in the description of a land cover feature to address the needs of a wide variety of end-users and disciplines. LCCS promotes **mappability** by providing the ability to clearly define a boundary between two classes.

Basic principle

A land cover class is defined by the combination of a set of independent diagnostic attributes, the so-called classifiers. The number of classifiers being used is proportional to the level of details of the description of a land cover feature.

Modules and tools of the LCCS software

Classification module

This module is used to define a land cover class according to the (1) the *Initial Dichotomous Phase* during which the user could select between two main land cover type alternatives at each level, and (2) *Modular-Hierarchical Phase* during which the user could further define land cover classes by the addition of classifiers.

Legend module

This module stores the identified land cover in a hierarchical structure that groups the classes according to the main land cover type.

Link tool

This tool is a new function introduced in version 2.0 of the software. It allows the user to establish a link between each single classifier forming a LCCS class and any value linked to any biophysical characteristic that can be related to land cover.

Translator module

This module allows existing classifications and legends to be translated into LCCS reference material. The system acts as a reference base allowing correlation between classifications and legends.

LCCS Modules and Tools

The first full operational version of the classification system LCCS and the software application has been developed through the Government of Italy Trust Fund Africover – East Africa Project in collaboration with the Environment and Natural Resources and the Land and Water Plant Nutrition Management Services of FAO.

