REVIEW

H. Geist (ed.) (2006): Our Earth's Changing Land: An Encyclopedia of Land-Use and Land-Cover Change

Greenwood Press, Westport, Connecticut, USA. Volume 1: A – K, Volume 2: L – Z, 715 + XLVIII p.; ISBN: 0-313-32704-1 (both volumes)

The two volumes of new "Encyclopedia of Land-Use and Land-Cover Change" are one of the results of the LUCC (Land Use/Cover Change) project, which was performed from 1995 to 2005 under the common auspices of the IGBP (International Geosphere – Biosphere Programme) and the IHDP (International Human Dimensions Programme on Global Environmental Change) programmes. This Encyclopedia creates also a base for a series of new projects coping with the global interaction of land, atmosphere and ocean. These projects have been launched in 2005, clustered under the ESS-P Programme (Earth System Science Partnership).

The main theme of the reviewed volumes can be summarised as "changing landscape in the World, its history, causes, impacts and assessment methods". The Encyclopedia is a result of work of about 90 authors from all over the world, although mostly from North America and Western Europe. We should appreciate that there was also one Czech among them – dr. Leoš Jeleček, a geographer from the Faculty of Science, Charles University in Prague. There are alphabetically arranged more than 300 entries on a respectable number of 700 text pages in the Encyclopedia. Three entries were pulled to the beginning of the first volume since they were considered crucial, and a larger space was devoted to them: "Land Change as a Forcing Function in Global Environmental Change" (B.L. Turner II), "Land Use Change in a Global, Historical Perspective" (K.K. Goldewijk) and "Land Cover Change" (A. Millington). These three topics constitute the backbone of the whole Encyclopedia, or a "crossroad" for the rest of entries.

Black and white photographs, graphs, maps and pictures suitably accompany some of the entries. Each entry is followed by a list of relating entries and further reading. There is also a "Guide to Related Topics" at the beginning of both volumes, which divides the entries of the whole Encyclopedia into 20 general topics (e.g. Causes, Dryland Change, Models and Scenarios). This Guide is a very useful tool since it enables us to use the books not only as a dictionary or encyclopedia but also directly as a textbook. Thanks to the adequate length of, and logical connectivity between the entries, a reader can quickly choose 10 or 20 entries relating to a particular topic and start studying immediately. The second volume is concluded with a short list of the most important literature and a list of contributors.

Entries of the reviewed Encyclopedia cover a large number of scientific disciplines and topics ranging from geology, climatology and hydrology, through ecology and geography, to economy and sociology. Stress is also laid on various cartographic and quantitative methods and techniques (satellite imagery, remote sensing, geographic information systems); and on applications and practise – policy tools, concrete projects of remote sensing of the Earth, international treaties and organizations etc. Entries describing the main regions and biotopes of the World are included as well. Shorter entries are focused on important persons and journals connected with landscape research.

Because farming and animal husbandry present an important driving force of landscape changes, there can be found many entries focusing on agriculture and agricultural science in the volumes. Encyclopedia's entries cover a wide range of agricultural topics from the beginning of farming (Domestication), through dominant crop plants (e.g. Cassava, Coffee, Cotton, Maize, Rice, Wheat) and farming methods and systems in the World, to crucial agricultural phenomena of last century (Agro-Industry, Green Revolution, etc.). Together with topics connected with livestock pro-

duction (Cattle Ranching, Pasture), the Encyclopedia focuses on negative ecological effects induced by farming (e.g. Desertification, Eutrophication, Salinization) and methods of their monitoring (Aerial Photography). Concrete projects of the Earth's remote sensing (Landsat, IKONOS, etc.) and various international policies connected with agricultural use of land (e.g. Land Degradation Assessment in Drylands Project) are mentioned as well.

A lot of interesting information for people both in agricultural research and practice can be found in most of the entries, even in those which are not explicitly agricultural. For instance, dominant agricultural land uses are embodied in the general descriptions of Earth's biotypes (e.g. Amazonia, Taiga). Furthermore, a high complexity of the encyclopedia's issue provides us with dense linkages between topics, enabling to understand agriculture both as a cause and a result of other phenomena connected with landscape change (ecology, society, economy, technology etc.).

We can have a few criticisms about the Encyclopedia. The graphics seem to be too rare in it. Although most of the entries are written comprehensibly enough, more graphs, tables, schemes or maps would make some of the entries more lucid and understandable. We also miss entries "Land Use" and "Land Cover", which would define these often confusingly and differently understood notions.

Despite these minor problems, the "Encyclopedia of Land-Use and Land-Cover Change" is a unique and splendid work. Its biggest advantages are the number and length of entries, which exceed an ordinary encyclopedia or dictionary. Of a great importance is also the interconnection of topics, thanks to which the volumes can be used as a textbook as well. Therefore, this Encyclopedia can be used both by researchers and lays interested not only in landscape and environmental changes, but also in every topic on the blurred margin between natural and social sciences, and in the practise in this field, too.

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