THE ILUS INTEGRATED LAND USE PLANNING CONCEPT

Willy H. Verheye
National Science Foundation Flanders, Belgium, and Geography Department, University of Gent, Belgium

Keywords: Incentives, integrated, land use planning, multidisciplinary, participative

Contents

1. Introduction
2. Aims and Objectives of ILUS
3. The Land
4. The ILUS Philosophy
   4.1. The Challenge
   4.2. Elements of a New Approach
   4.3. A Platform for Negotiation
   4.4. New Policy
   4.5. Basis for a More Successful Strategy
   4.6. Illustrative Case Studies
5. Conclusions
Glossary
Bibliography
Biographical Sketch

Summary

I.L.U.S is an acronym for the International Land Use Society. Its objective is to contribute to the development of scientific and practical knowledge about integrated participative land use planning and the optimal sustainable use of natural resources, and to disseminate this information through publications, seminars and related initiatives. The long-term objective of the Society is to establish a group of people and expertise that can respond at best to fellow members and, if there is no direct help, to post on the question to the Society at large.

The Society is publishing since 1997 a journal, The Land, which is a major tool in the effective dissemination of the concepts of multidisciplinary, integrated and participative land use planning. The journal holds four main sections: an Editorial which expresses the formal viewpoint of ILUS on relevant land issues, a selected number of peer-reviewed professional papers, a Letterbox with comments and reflections from readers, and a Book review section.

This chapter describes the general philosophy of ILUS through a review of some of the most relevant Editorials and professional papers published over the past years.

1. Introduction
I.L.U.S. is an acronym for the International Land Use Society which, in itself, is an abbreviation of the International Society for Integrated Land Resources Management. The idea to create a new society grew out of an FAO expert meeting in 1996 in Rome where the need was formulated for a better dissemination to the broader public, including field technicians and the academic world, of a more integrated and participative approach to land resources management. As the UN Task Force Manager for the land chapter in Agenda 21 - the implementation program of the UNCED Conference - FAO strongly supported the creation of such an international professional forum that could serve as a focal point for rural development in Third World countries.

The major purpose of the Society was to contribute to the development of scientific and practical knowledge about integrated participative land use planning and optimal sustainable use of natural resources, and to disseminate this information through publications, national and international seminars, and any other related initiatives.

The Society was founded May 1996 as an independent non-profit organization registered in Belgium. Its constitution was published in the Official Gazette July, 25 1996 (art.17.093). Since 1997 it has published an international journal, The Land, which is a major tool to implement its major objective for disseminating modern approaches to land use information. In 2005 the publication of The Land stopped and the activities of the International Land Use Society have been integrated with the World Association of Soil and Water Conservation (WASWC) which has its own websites and on-line journal with worldwide dissemination.

2. Aims and Objectives of ILUS

Land is prized by everyone: today and every day people are killing each other for land. Having taken possession, maybe at great cost, people often then destroy the very resources they depend on. Throughout the world, degradation of soil, water forests and farmlands continues apace by deforestation, overgrazing, soil erosion, soil salt accumulation and loss of biodiversity. In poor countries, impoverished rural people become increasingly vulnerable to natural disasters or suffer from different forms of soil degradation (erosion, nutrient depletion, salinization, etc.) which adversely affect yields. In rich countries there are insidious problems of soil, water and air pollution, soil compaction and erosion, as well as a shrinking genetic base.

One reason for this paradox is ignorance. For all the well-documented degradation of land and the existence of apparently effective technical solutions to many problems of land use, action is hamstrung by a lack of well-found knowledge of the land amongst land users or policy makers.

Information reduces our uncertainty; it is the very basis of our decisions. But information is not simply data. We have to interpret the data to answer the question in hand and it is the interpretation that turns data into useful information. Therefore, information can not be divorced from either the questions in se or the person grappling with these questions.

When it comes to information about natural resources, three situations can occur:
There are no data;

- Relevant data exist but the people making the decisions do not know about them or do not have access to them. In poor and emerging countries, hardly any land user has access to professional information. Often, data gathered in the past by long-term survey efforts are no longer available in-country to anyone, or they are being lost completely through closure or reorganization of institutions in the countries that hold them. Loss and dispersal of experienced staff also means a loss of the capacity to interpret such data as are available.

- Data exist, are accessible, but are not comprehensible to the people who make policy and land use decisions. Usually the data are of variable quality but the decision-makers and even professionals in allied fields, have no way of knowing even which are reliable and which are not. Generalist decision makers cannot be expected to undertake interpretation of specialist data. Unless the information has to be carried to the point of decision by natural resources specialists, much is lost along the way.

Nevertheless, expert knowledge of land resources and their assessment has increased tremendously during the last half century. The development of large-scale tropical agriculture - in particular plantation agriculture - and of national or regional development programs, have urged for extensive soil and natural resources surveys, carried out by or in collaboration with specialized UN agencies, World Bank and international consulting firms. Over time, local experts were trained and national soil survey institutes were created in the developing countries themselves, and most field observations and mapping work were carried out by national survey teams.

In 1976 the FAO Framework for Land Evaluation broke new ground, giving a more applied impetus to soil survey work but also moving land evaluation beyond the too narrow bounds of soil science, focusing hereby in particular on the broader land requirements of specific crops and cropping systems. In a next step, and in view of the UN Conference for Environment and Development (UNCED, Rio de Janeiro, 1992) many countries have prepared National Environmental Action Plans (NEAPs), where a state-of-the-art was made on the available information on natural resources.

Hence, the problem is often not that the data have not been collected, but that they are either no more available or not available in the proper format, while there are no funds for an additional information gathering.

There is also a more fundamental problem that goes beyond the obfuscating jargon and the intimidating welter of data. Decision-makers in general have no place for the collection and/or interpretation of natural resources information, either because they do not have the technical background - most decision-makers are politicians and/or economists - or because they are not aware of the overruling impact of natural land conditions. In other words, they often do not know what information to ask for: what they really want they do not get and what they get they certainly do not want!

So, where do we turn for knowledge of the land? Good advice is hard to come by,
sometimes even to recognize. Line ministries and sector agencies, NGOs, commercial companies, universities, all have their own agendas. They may have imperatives other than giving disinterested advice and information. Our first choice would be a specialist colleague whose integrity and judgment we have learned to trust but, if we are working in isolation or without adequate institutional support, we may have no one to turn to.

All around the world, there are dedicated people working for the sustainable use of natural resources. They belong not to one particular profession, but to many professions. They are members of no formal society but recognize one another immediately. Why not then, form an international society to provide mutual help and support, to provide that good advice and key information.

The objective of the Society is to establish a group of people and of expertise that can respond at best to fellow members and, if there is no direct help, to post on the question to the Society at large. In other words, the Society is conceived as a self-help network of professionals in natural resources, environment and development. We are not in business or do not supplant any other institution. We can respond only as individuals, but we know from experience that this can make a difference. Often we can make rapid progress with the problem in hand when, as with a jigsaw puzzle, a single small piece is supplied. The missing piece we need may be a method, some quite simple equipment, or an idea bought with experience elsewhere. On the other hand progress may be set back for years by the wrong piece of jigsaw - perhaps a bad soil map or an inappropriate method. Fair trade in information and ideas between the far flung members of the Society can supply missing pieces, immediately, disinterestedly and free. We can share information and hard-won experience person-to-person, by letter, fax or e-mail, with the journal taking up issues of common interest in greater depth.

It would be a pity to confine our activities to the ranks of natural resources professionals. The Society also needs the people who are going to use the information in land use and management, in drawing up policies and in influencing public opinion. Here, the Society will seek help to be carrying first-hand, accurate information about natural resources to the point of decision.

Besides establishing a membership list to keep rapidly in touch with those who can supply information, the Society has also a website (http://www.nri.org/ theland) and is editing a journal, The Land, which is published three times a year and which deals in greater depth with topical natural resources and development issues.

The journal has been sponsored by FAO for the first years, but the Society has complete editorial independence.

TO ACCESS ALL THE 15 PAGES OF THIS CHAPTER, Click here
Bibliography

Beek, K.J., de Bie, C.A. & P.M. Driessen (1997). *Land Information and Land Evaluation for Land Use Planning and Sustainable Land Management*. The Land, 1(1): 27-44. [This article reviews the development of the FAO Framework for Land Evaluation and provides a framework for the recent application of modeling and other computer-assisted techniques]


Benneh, G., Kasanga, R.K. & D. Amoyaw (1997). *Land Tenure and Women’s Access to Agricultural Land*. The Land, 1(2): 81-104 [A case study on land tenure problems in three selected areas in the savannah and forestry districts of Ghana, concluding that women are not discriminated in the access to land in this area].


Boje, G., Rücker, G., Senzige, S. & A. Skowronek (1998). *Stubborn Constraints on Dry-season Wetland Agriculture in NW-Tanzania: A Case Study of the Bigombo Valley Development Project*. The Land, 2(1): 21-28. [A case study on how a community of small farmers can succeed in developing the land but later, as a result of lack of information, has to abandon its efforts].

Brinn, J. (1997). *Land Use, Tsetse, Participation and Privatization in Zambia*. The Land, 1(3): 183-196. [A case study from Chiawa area, Zambia, illustrating how local initiatives and knowledge were incorporated into the planning process].


Dercon, G., Deckers, J., Poeseen, J & G. Govers (2001). *3-D Education, Discussion and Planning Tools for Agricultural Systems at Multiple Scales in Mountain Areas - A Bridge between System Research and Rural Communities in the Austro Ecuadorian*. The Land, 5(1): 31-50. [A case study from Ecuador illustrating the use of scale models to attract the attention and involvement of the local population in land use management].


look to firewood exploitation in a more or less important awareness of environmental protection].

Roloff, G. & N. Bragagnolo (1997). Strategies for Successful Conservation Programs: The Case of Parana State, Brazil. The Land, 1(3) : 171-182. [A case study where the combination of appropriate technology, stakeholder involvement and trained and motivated personal was central].


Verheye, W., Brinkman, R. & D. Sims (1997). Elements of a Different Approach to Land Development Issues. The Land, 1(2):143-152. [Identifies the main problems of former approaches and provides a set of five principles as a possible basis for an integrated and more successful strategy for the future].

WCED - World Commission on Environment (1989). Our Common Future. Oxford University Press, Oxford, UK. [This report, also known as the Bruntlandt report, warns for the risks of an unlimited exploitation of the natural resources with a major negative impact for future generations].

WASWC-World Association of Soil and Water Conservation, Bangkok, Thailand, Websites: www.waswc.org and http://waswc.ait.ac.th [These websites provide updated information on meetings, publications and various events related to soil, water and land studies, worldwide]

Biographical Sketch

Willy Verheye is an Emeritus Research Director at the National Science Foundation, Flanders, and a former Professor in the Geography Department, University of Ghent, Belgium. He holds an M.Sc. degree in Physical Geography (1961), a Ph.D. in soil science (1970) and a Post-Doctoral Degree in soil science and land use planning (1980).

He has been active for more than thirty-five years, both in the academic world, as a professor/ research director in soil science, land evaluation, and land use planning, and as a technical and scientific advisor for rural development projects, especially in developing countries. His research has mainly focused on the field characterization of soils and soil potentials and on the integration of socio-economic and environmental aspects in rural land use planning. He was a technical and scientific advisor in more than 100 development projects for international (UNDP, FAO, World Bank, African and Asian Development Banks, etc.) and national agencies, as well as for development companies and NGOs active in intertropical regions.