A Research Coding System for Land-Related Scientists: 
A Conceptual View

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SUMMARY

Land has many meanings with different things to different people, depending upon their outlook and their interest at the moment. To many it is simply the space for human activity as reflected in the many forms of land use. It is however defined as an area of the surface of the earth together with the water, soil, rocks, and minerals or upon it and the air above it. It embraces all things which are related to a fixed area or point of the surface of the each, including the areas covered by water, including the sea. Because of the nature of land itself, it concerns not only abstract or thematic attributes but also physical, spatial or topographic ones. For researchers, therefore, selecting and focusing on a specific land-related subject is really a complicated and difficult task. Many concepts and effects which include land phenomena should carefully be analysed in order to make some significant works. When a land researcher aims to achieve land issues with certain objectives, first, topic and methodology should be determined. In this paper, in order to carry out a research on land-related themes, a conceptual framework based on a coded research field has been given. While land subjects are mainly categorized under the resource and information management aspects; methodological outline by organization perspectives and requirements are also explained with respect to design and evaluation point of views.
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1. INTRODUCTION

As Shridath S. Ramphal who is the former General Secretary of Commonwealth is expressed, land is the habitat of man and its wide use is crucial for the economic, social, and environmental advancement of all countries—indeed for human survival. Although it is part of man’s natural heritage, access to land is controlled by ownership patterns; it is partitioned for administrative and economic purposes, and it is used and transformed in a myriad ways (Dale and McLaughlin, 1988).

Population growth, technological and social hazards, and environmental degradation have all to be taken into greater account today by policy-makers, resource planners, and administrators who make decisions about the land. They of course need more detailed information on land than has been traditionally available. Today, mostly based on the computerized systems and networks, land-related information should be acquired, stored, processed, and shared in a more better ways. Because, systematic data of land and effects on in land have great importance for humankind in order to make additional realistic decisions in land administration, land planning and land development activities. It is also realized that policy makers, planners, land developers, and individual citizens all have a need for information about land and make significant use of spatial data on a day by day basis.

So, the main question is who will supply all these land related expectations and how? Besides governmental bodies that are dealing with land activities, special expert and researches interested in land research has great responsibilities in order to find out solutions for humankinds’ expectations on all land relevant activities. This mean a broad range of topics and concerns, ranging from the formulation of land information policy through the design, evaluation and implementation of land to specific data requirements is essential.

2. A CONCEPTUAL VIEW FOR LAND STUDIES

Because of the land is a widely phoneme no, in many cases, to find and focus on a land-related topic is a crucial task for researches. To simplify this task, as presented in Figure 1, land-related subject can be categorized into two parts at the beginning. These are; land can be seen as a resource management and as an information management fact. When it is seen as a resource management that means land tenure, cadastre, land use management, land surveying, mapping, valuation, natural resource management issues, policies etc should be focused as a main subject. On the other hand, when land is seen as an information management fact, mostly technology is highlighted with respect to data standards, data models, networking, data flow, exchange etc subjects should be focused on (Nichols, 1990; Yomralioglu, 2006).
When a main research subject is determined then point of views, in other words, the scope or scale of study should be preferred. The examination of interested land study area can be on global, national, regional, provincial, urban or rural bases. From these perspectives, the next stage is to make decision on research methodology. This can be either a design or evaluation. When methodology is based on designing process a general modeling, implementation of a specific application can be considered. If the evaluation is selected as a research methodology then some case studies, comparative works or cost/benefit analyses on land can be considered. On the other hand, it should always be noticed that either design or evaluation methodologies is selected, the whole process will be depend on specific requirements such as developments, management, technologies and polices needs.

Once a subject is determined concerning the study methodology then researchers can code their work in order to describe it in a simple way. As shown in Figure 2, a methodology can be based on; [1] design or [3] evaluation or [2] both. On the other side, a subject can be based on [1] resource management, [3] information management, or [2] both. In this framework, for example, if a land readjustment system will be examined for a better implementation process with new information technology for a country then a design will be considered with an information management subjects. This can be expressed as [1][3] descriptive code. Or the other example, if dealing with a regional cadastral system issues with agricultural conditions then [2][1] code can be used.

3. CONCLUSION

Because of the nature of land itself, it concerns not only abstract or thematic attributes but also physical, spatial or topographic ones. For researchers, therefore, selecting and focusing on a specific land-related subject is really a complicated task. Many concepts and effects which include land phenomena should carefully be analyzed in order to make some significant works. When a land researcher aims to achieve land issues with certain objectives, first, topic and methodology should be determined. In this paper, in order to carry out a research on land-related themes, a conceptual framework based on a coded research field has been given. While land subjects are mainly categorized under the resource and information management aspects; methodological outline by organization perspectives and requirements are also considered with respect to design and evaluation point of views.

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Figure 1: A conceptual framework of land-related studies
Figure 2: A coding approach for a land-related research cases
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