

Land Information Management in Kenya

An Integrated Approach

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1. Abstract

The satisfactory formulation and successful implementation of any land management project inevitably requires an accurate knowledge of the land resources actually or potentially available, and the degree to which they are being used, misused or neglected. A good land information infrastructure provides information towards this end. Because most developing countries have poor land information infrastructures, many important land management projects aimed at boosting agricultural production are often poorly implemented or abandoned.

Taking Kenya as an example, this paper examines the current land information practices in the country. It notes that they are characterized by much paper processing, an obsolete "go it alone" approach by the different interested professions and a lot of bureaucratic red tape to the access and exchange of land information. The paper suggests improvements to these information practices as an important step towards sustainable land management in Kenya and other developing countries.

Keywords: Land Information Management, Integrated Surveying

2. Land Information Management

Land information management may be defined as the effective use of land information in support of land management; land management entails the taking and implementation of decisions about the acquisition, use and conservation of land resources. Better land management is increasingly in high demand due to the low land resource/population ratios in many parts of the world, especially in the developing world where most economies are still agrarian. The major objective of land information management is to utilize the available information, human and technology resources towards more effective decision making about land. At the very minimum, a good land information management system should enable decision makers to know what land resources are available, and to what extent these are being used, misused or neglected.

3. Land Information Management in Kenya

Kenya is a representative developing country in which many development projects in the agricultural and other sectors (e.g the Tana River Irrigation Schemes) are often poorly implemented or abandoned due to poor land information management.

3.1 Land Ownership Formalization in Kenya

The documentation of data and information about land often begins with the formalization of land ownership through some form of land registration. This is often preceded by land adjudication and cadastral survey, which many countries in the region have not been able to undertake due to limited technical and human resources. In this respect, Kenya is quite ahead in the region, having successfully formalized land ownership in most of its high potential agricultural areas using interim cadastral maps called preliminary index diagrams. This is a technology that other developing countries may consider to adopt, since these diagrams can now be improved through digital processing into more accurate maps; details of this can be found in Mulaku (1995) and Mulaku and McLaughlin (1996). However, land ownership in over 40% of Kenya still remains informal.

3.2 Constraints to Good LIM in Kenya

Good land information management should enable the determination of and provision for the information requirements of users, including the efficient flow of information from producer to user and between users. It should also enable continuous evaluation of the information system used plus the information produced against changing user needs and provide for their updating whenever necessary.

Measured against these standards, any observer of land information management in Kenya is bound to note that it is far from the mark. The proper management of whatever land information exists is still hampered by various constraints, some of which are:

- **Paper Processing:**
This is slow, inefficient and exposes much of the data to permanent loss, as amply evidenced by the present circumstances at the Ministry of Lands in Nairobi.
- **Bureaucratic Red Tape:**
There continues to be a lot of official suspicion of people visiting lands offices seeking data or associated map products; this hampers the flow of land information to users and is especially frustrating to potential researchers on land matters, whose findings could help improve existing LIM systems.
- **A Non-integrated Approach:**
Each of the landed professions follows a "go it alone" approach, in which, for example, surveyors are hardly in touch with what values, planners or quantity surveyors do; yet they often need the same kinds of data or to exchange the information they generate. This results in a lot of duplicated effort and data redundancy, in addition to frustrating land owners and developers who have to consult different professionals for land planning, surveying, valuing, etc.

3.3 Proposed Improvements

The proper management of land information can have a far reaching positive impact on a nation's economy, since it enhances land transactions, property taxation and public planning in general (Dale and McLaughlin, 1988). It is therefore in the interest of the national economy that land information management practices be improved. Some suggested measures towards this end are:

- Faster progress in the formalization of land tenure where this has yet to be done.
- A greater commitment by the government to the adoption and maintenance of information technology solutions to land information management problems e.g. by computerizing land records, setting up shareable databases, etc. However, it must be pointed out that merely computerizing existing inefficient paper based systems will not by itself improve effectiveness; these manual systems need to be better designed before computerization.
- Reduced bureaucratic red tape to the access and exchange of land information.
- Greater cooperation amongst the different landed professions with the long-term objective of creating a stronger integrated surveying profession. A good start could be an integrated approach to the training of surveyors, so that the new surveying graduate will be sufficiently broad based as to be able to perform most of the functions of the present different landed professionals. A curriculum for such training has been proposed by Aduol et al (1995).
- Greater cooperation amongst the countries of the region in land matters, including the sharing of related research findings; the newly launched East African Cooperation provides an ideal framework for this.

4. Conclusion

This paper has highlighted the major weaknesses of land information management practice in Kenya and pointed out that this practice could gain immensely from various applications of Information Technology. It has also been recommended that institutional arrangements be changed to facilitate easier access to and exchange of land information plus an integrated approach to training in and practice of surveying. These measures, plus greater international cooperation in land matters in the region would probably boost the economy, which depends to a large extent on the proper utilization of land resources.

5. References

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