

# WHAT IS AN APPROPRIATE CADASTRAL SYSTEM IN AFRICA?

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**Key words:**

## **ABSTRACT**

The following discussion is based on my experiences from working with cadastral issues in some African countries south of Sahara and from experiences gained from work within the Commission 7 of FIG.

## **THE PROBLEM**

The aim of this paper is to discuss about the fact that cadastre in several African countries have been introduced mainly through a colonial administration and served the purpose of securing tenure for settlers in an European law tradition, contrary to the African traditional law and tenure systems. Trials to expand the European cadastre to traditional land have generally not been very successful. The failures have been blamed on among others:

- Technical issues, for instance too high demands on accurate cadastral surveys, which are too costly to be financed through the income generated from the ongoing land use
- Lack of well-trained staff to carry out the services
- Lack of modern equipment, like total stations, EDM, GPS for cadastral surveying and computers for land registration
- Lack of financial resources for investments in improved and expanded systems
- Lack of legislation and capacity to implement legislation
- Lack of good management capacity and practices
- Lack of co-ordination and co-operation between different governmental departments
- Corruption among land administration officials

Sometimes the conclusion of these problems has been that cadastre and land registration is not appropriate for African conditions. Africans need to develop new approaches to land information, for instance information system to support decision-making regarding land use and management that are not based on the principles of cadastre.

Kenya is perhaps the best examples of a country, which has tried to establish European-like cadastral systems for land registration through adjudication of existing traditional rights in very systematic and comprehensive way, through different more and more simple methods in order to keep the costs for the registration as low and affordable as possible. Several millions of parcels have been registered in these adjudication processes. Yet, there is no clear evidence that this enormous investment by the government is contributing to economic development in a way that should motivate the investments made. On the contrary, the cadastral system thus established seems in many cases to fall apart through

lack of proper maintenance. The poor maintenance can depend on many different causes, from lack of interest and understanding among the landowners to lack of appropriate services from the responsible authority. Both can be translated into a lack of demand of cadastral services.

## **WHAT IS A CADASTRE**

FIG has adopted a statement on cadastre 1995. This statement has the aim to clarify that a cadastre is first of all a land information system to provide information about rights, use or values on land. It is usually (but need not always be) parcel-based. This means that the important information carrier in the system is a piece of land, which it for some reason is meaningful to keep separated from other pieces of land. The usual reason is that someone claim ownership or some other rights on this piece of land. The purpose for which the cadastre has been established has first of all been for land administration by governments (taxation and control of land use and distribution of land rights). The second most important purpose has been to provide security of tenure for the land owner/user, for the land market, for investments and as working capital (mortgaging). The third growing need of a cadastre is to provide land information for sustainable management of the land resources in a perspective of environmental concern, both from governments and land users.

The statement also clarifies that the cadastre is not only an information system, but also a process. It can include the processes of adjudication land rights, of distributing/ allocating land rights, of solving disputes around land use rights, of determining appropriate land use, of controlling land use, of facilitating land markets and of controlling the development on land markets. The procedures needed to control these processes, make them transparent and participatory are essential parts of a cadastral system. But the colonial powers that introduced cadastral systems in Africa were never interested in these aspects of the cadastral system.

Cadastral systems world-wide are designed in many ways, some more effective than others. The FIG statement on cadastre is designed in such a way that it can accommodate all types of systems from different jurisdictions, Common law, Roman law, Germanic law, Nordic law, Islamic law, Chinese law, Socialistic law and all types of traditional law regimes. Within this context, rules and regulations exist, which are very different. This is to be understood such as the cadastre can be designed to suite any law family and traditions. It is as a concept (as it has been expressed in the FIG statement on cadastre) not linked to any particular law regime. It can perfectly well handle ownership issues as well as more limited user rights.

**Cadastral issues according to the FIG Statement on Cadastre:**

- Land tenure
- Systematic and sporadic land registration
- Definition, demarcation and delineation of boundaries
- Technical methods for surveying and mapping
- Computer technology
- Organisation, co-ordination and management of the cadastre
- The role of cadastral systems in formulating, implementing and monitoring land policy
- Access to liable data
- Financing and policy strategies

**DEMANDS ON CADASTRE**

African countries in general have large areas of land, which are sparsely populated. The economic output from these land is generally very low. Only specific types of land use can generate income that can motivate the investment in a cadastral system.

One aim of a cadastre is to provide security of tenure. The customary tenure systems in African countries, which usually comprises most land provides adequate security of tenure for the members of the community. Transfer of land between members of the community can usually also be handled with enough security within the traditional systems. There is therefore no need and consequently no demand from land users of systematic establishment of cadastral systems in these large areas. Any attempt in that direction will consequently fail.

The traditional system is however unable to provide appropriate security of tenure in areas where it no longer exists, or are being misused or for other reasons are falling apart. One such misuse occurs when traditional leaders starts to look upon themselves as owners (instead of custodians on behalf of the community) of the land and see opportunities to own money on land transactions and speculations.

Other disturbances of the customary tenure occur with migration of people, mixing of people of different origin, diseases and calamities, investment by foreigners, and the urbanisation. In all these situations, which are more and more frequent, there is a demand for some kind of more elaborated cadastral system in order to provide the security of tenure that the customary tenure fail to provide. But the system must be appropriate, which means that they must be designed in such a way that they are affordable and accessible for the users.

African countries need economic development and thus need investments. One of the most important sectors for investments in African countries is agriculture and other types of efficient land use. Capital needs to be brought in from abroad. This will not happen without a cadastral system, which can provide security of tenure for these investments. The investor needs security for his investment. He also needs to finance his investments through financial institutes, which in turn will demand security for the credit provided.

Also indigenous people who like to develop, entrepreneurs need access to security of tenure and for mortgages in order to be able to attract capital. Obviously, there is an urgent need for development of cadastral systems in African countries to promote economic development.

Demands on social justice will also create demands on the establishment of cadastral systems. Womens rights to land and property are usually protected by modern legislation and constitutions in African countries, while practice in case of divorce or decease of the husband usually is governed by traditional law. Traditional law does usually not protect women's rights in the same way as modern legislation. Cadastral systems will improve the possibilities for women to protect their rights according to the modern legislation. Cadastral systems will allow the establishment of procedures for fair land allocation, prevent land speculation, protect ethnic minority interests etc. One consequence of aids is a demand to provide for proper registration of property to protect children's access to heritage after their parents.

From government point of view, land information is needed for taxation of land and property, and for better decision-making for sustainable development of land resources, through for instance land use planning, improvements of land management practices and for environmental protection.

Land markets are usually regarded as more efficient on allocating land resources to most economic use than traditional land tenure systems. In order to function well, with low risks and low transaction costs, land markets need cadastral systems to provide reliable information to the actors on the market. However, cadastral systems will not create land markets. When economic development in an area is reaching such levels, when demands on a more efficient land market occur, the time will be ripe to introduce cadastral systems.

Economic development, investments etc can create conflicts between investors and traditional land users, Modern governmental administration can come into conflict with traditional leaders authority and also into conflicts with local communities. Often much money is involved and temptations for corruption occur. Cadastral systems can be demanded in order to establish more transparent procedures and to allow for solving interest conflicts of this kind to the benefit for all parties.

## **APPROPRIATE CADASTRAL DEVELOPMENT IN AFRICAN COUNTRIES**

My suggestion is that development of cadastral systems in African countries in general too much focused on the question of providing cadastral information in a systematic way for large tracts of land and too little on a cadastral system as a set of procedures to handle land use rights, solve conflicts and competing interests and provide transparency and participation in decision-making regarding land use. Cadastral development should follow upon an expressed demand on the system from the users, i.e. the users should see clear benefits of the system, which will motivate the investment and the participation. Only then can the investment be sustainable through proper maintenance.

The analysis of the demand on cadastral development shows that there not will be demands on comprehensive coverage of African countries with cadastral systems for foreseeable future. But there will be demand on cadastral systems for specific situations namely:

- Areas where no traditional tenure exists but where there are demands on land
- Areas where more functional land markets are developing
- Areas affected by migration, especially urban areas
- Areas for investments in improved land use

Cadastral procedures are needed to:

- Protect the interest of women, ethnic minorities and migrated people (sometimes in conflict with traditional society)
- Solve conflicting interest between investors and traditional land users and other conflicts regarding land use
- Promote fair allocation and access to land resources among the population (social justice), prevent land speculation and provide transparency and participation in decision-making
- For taxation of valuable land resources
- For better decisions-making regarding land use, increased sustainable production and protection of environmental values for all species

Information systems must be designed in such a way that the costs for the establishment and maintenance of the system are affordable compared to the economic value of the existing land use. This can be achieved through a combination of modern technology and a flexible/ non-traditional approach to the information content of the information system and the technical and legal demands on accuracy etc.

Cadastral procedures should be designed to allow for an efficient decision-making based on law and free from political influence. The process should be participatory and transparent. The cadastral officer should be responsible to investigate all aspects of cases and to protect all private and public interests on an equal basis in the process.

I believe that the new land policy and land legislation in for instance Tanzania and Mozambique are excellent examples of development in the direction I am promoting.

## **REFERENCES**

FIG Statement on the Cadastre, 1995

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