

GEO-REFERENCING PROPERTY MAPS WILL MINIMIZE BOUNDARY DISPUTES

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What is geo-referencing?

Now all maps prepared to support title deeds in Kenya must be geo-referenced. Soon after this text was written into the new land laws, lawyers and other professionals not familiar with the term were out asking what this geo-referencing is. Geo-referencing helps us to define hence locate an object in space. For international networking, this is best done by assigning coordinates to points of interest based on a global reference system. Once an object or point on the surface of the earth is geo-referenced, it becomes easy to give directions and distances between places. This makes it easy to programme travel routes, develop and connect infrastructural projects such as roads and railways. It makes mapping and connecting countries and regions possible. This is what has made today's Global Positioning Systems (GPS), which has revolutionized road and air travel, possible. One can of course geo-reference objects through traditional surveying and mapping methods. But this is comparatively more tedious and expensive. Technology has made it possible to geo-reference through use of modern methods.

Geo-referencing will help Kenya to develop a computer-based land information management system

Kenya has hitherto used a mixture of geo-referenced (coordinated) and non geo-referenced (graphical sketches) property maps to support title deeds. When lost, non-referenced property boundaries are hard to relocate. One can only use memory and site evidence. Memory and such evidence sometimes fail, leading to the incorrect re-establishment of such boundaries, hence disputes. Referenced boundaries, where lost, are easily relocated through use of survey

measurements, based on their geo-values/coordinates. For this reason, such boundaries attract few disputes. Where disputes arise, they're easily resolved by surveyors. Geo-referenced boundaries and maps can also be fed into a computer base to form a land information management system which allows one to update and retrieve maps real time. Such a system can also be fed with parcel details such as size, value, use and owner, making land governance and administration quite efficient. Kenya is in the process of developing such a system.

Most rural registry maps are not geo-referenced

Licensed surveyors, lawyers and architects are familiar with the sketches filed under the Registration of Documents Act to support sub-leases in various urban centers. Such sketches are not geo-referenced. They are therefore unsuited for a modern land information system. Most maps developed from previous adjudication exercises for most parts of Kenya are not geo-referenced. Titles to most rural properties are supported by such maps. That is why boundary disputes keep accumulating in rural land registries. The respective property maps have no geo-values/coordinates, making it difficult to use measurements to determine boundary positions. Such maps too cannot be loaded onto a modern land information system without some major technical attention to first geo-reference them. Such maps are a nightmare too for infrastructure providers who cannot fully rely on them for development projects.

Modern technology aids rapid geo-referencing

At the time most such maps were prepared, technology was still rudimentary and wouldn't have allowed the rapid mapping and registration of such areas through geo-referencing. But this has now changed and all parts of Kenya can be geo-referenced for titling through modern methods. Geo-referenced/coordinated parcel boundaries, through their geo-values/coordinates, will then be fed into a computer base for easier storage, updating, sharing and public dissemination. Boundary disputes will be much easier to resolve.

This is why the new Land Registration Act requires that all parcel boundaries on cadastral maps (maps to support titles) be geo-referenced and surveyed to standards which ensure compatibility. Given the level of technological development and the experience with non geo-referenced maps in Kenya to date, this was long overdue. Let's all then support the authorities responsible to make geo-referencing of property maps in Kenya a reality.

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