The Cadastral LIS as a Tool for Land Conflict Resolution in Rural Communities in Rural Communities of Ghana – A Case Study

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Key words:

SUMMARY

The history of land record keeping in the country is a recent phenomenon and at best restricted to urban Ghana. Record keeping on land in the rural areas in the country has been mainly through oral tradition. Thus, the absence of cadastral maps showing boundaries of land parcels to some scientific accuracy has been the single most important contributing factor to the numerous land disputes leading to serious conflicts on land issues in the country and particularly in the rural communities where there is predominance of settler farmers. The paper therefore discusses the issues on land disputes in rural areas. The importance of a rural Cadastre is examined and a Cadastral Land Information System prepared by for the township of Sefwi Yamfo, a settler farming community. Initial finding suggest that both the settler farmers and the land owners are satisfied with the project since it guarantees security of tenure to the settler farmers as well as steady and definite revenue (income) to the land owners (chiefs), since each knows the extent of their holdings.

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1. INTRODUCTION

Land record keeping is a recent phenomenon in the country. In most part of Ghana until recently, land records were kept through oral tradition especially in the rural communities. This non-documentation and demarcation of stool, skin, family or clan lands and boundaries has created a situation of "overlapping claims" from neighbours. This has generally resulted in misunderstanding and conflicts between them. Serious conflicts have arisen basically as a result of difficulties in deciding allodial rights, uncertain boundary allocation and multiple sales of land parcels. These conflicts and misunderstandings are mostly between families, clans, villages, towns and particularly natives and settler farmers. Cases on land litter the whole landscape of the nation with most of them in the urban centres and the cocoa growing zones.

The recent pronouncement by the Chief Justice of the country that there are about sixty thousand (60,000) cases involving land dispute pending in the courts is a clear manifestation of the situation. It is believed that a similar number of cases are also pending at the traditional courts at the various regional house of chiefs.

The negative effects of these long standing litigation and conflicts on the socio-economic development of the country cannot be over emphasised. At the local level, these have led to the decline in economic sustainability of the land, which have led to food insecurity, and perpetuity of poverty. This is most common in the cash crop growing zones particularly the cocoa growing areas of the country. The land tenure systems prevailing in these areas are the "ebunu" and "ebusa". The Abunu tenancy is the system whereby the owner of an uncultivated virgin land grants it to another person (usually a stranger) to cultivate and to share the produce of the farm with the owner in the ratio of two-thirds (2/3) to tenant-farmer and one third to the (1/3) to the land owner. (da Rocha and Lodoh 1993). The reason why the tenant-farmer gets 2/3 of the produce of the cultivated land is that since the landlord contributes nothing to making of the farm except the virgin forest land, the tenant-farmer, who contributed his labour and other inputs to the farm must necessarily get the greater share. Abunu however is a system by which a landowner either cultivates a farm on his own or provides that other person with money and/or labour to cultivate the farm. In either case, the proceeds of the farm are shared equally between the landowner and the tenant farmer. The customary tenancies have been in use in the country even before the penetration of money into the economy by the Europeans (da Rocha and Lodoh 1995). Even though this tenancy arrangement has been in use for a long time, it has recently seen a lot of abuse by the landlords especially after the death of the original tenant farmer and has thus generated a lot of litigaton. A classical example is the case between Lamptey alias Nkpa verses Fanyie and others. This case travelled from the High Court through the Court of Appeal to the Supreme

Court (1989-1990 G.L.R.D.28). Recent indications are that landowners normally take over farms cultivated by stranger tenant farmers when the farm produce reaches their peak production stage. This social injustice is breeding discontent among many rural communities especially in the Western region, Ashanti (New Edubease) and the Brong Ahafo region (near Goaso). In the majority of the cases there are no cadastral plans on the land parcels involved in the tenancy arrangement.

The main objective of this research therefore was to develop a cadastre on a pilot basis to try and alleviate some of the encumbrances brought about as a result of the land tenure arrangements. A cadastre according to FIG is a methodically arranged public inventory of data concerning property which a certain country or district owns based on a survey of their boundaries. It also states that such properties are systematically identified by means of some separate designation. The outlines of the property and the parcel identifier normally are shown on large-scale maps which together with registers may show for each separate property the nature, size, value and legal rights associated with the definition of a cadastre in view of procedure was developed for the project.

2. THE CASE STUDY

A locality within the Sefwi-Wiawso in the Western Region district called Sefwi-Yamfo was selected as the pilot area for the project. This was because there has been a standing litigation between the chief and the settler farmers in the locality. There was also a problem between the district assembly on one side and the chief and the settler farmers on the other hand on the payment of the appropriate scale of taxes on their produce from the utilisation of the agricultural land. The project therefore set out to produce a cadastral plan showing the boundaries of individual holdings within the jurisdiction of the chief. It was also to seek information that identifies those people who have interest in the parcel of land and find out the nature of the interest with the view of protecting the venerable such as women and children in the locality.

3. METHODOLOGY

Preparation of the Cadastral Plan

Due to the sensitive nature of the settler farmers' problem in the country and especially in the Western Region and particularly in the Sefwi district, a stakeholder's forum was organised as a first step in introducing the project to them. At this forum, all the important stakeholders were present, namely the chief and elders, the regional and district representatives of the office of the Administrator of Stool lands, the Assemblyman representing the District Assembly, majority of the settler farmers and the representatives and all interested groups of the locality. At the forum, the aims and objectives of the project were all explained. The government representative in the person of the regional officer of the Administrator of Stool Land emphasised the fact that the government needed peace in order to carry out its Poverty Reduction Strategy policy. All the stakeholders then pledged their cooperation to make the project succeed. Thus a cooperative environment was created for the physical ground of the various parcels in the locality to commence.

Preparation of the actual Cadastral map started with the clearing of the allodial boundaries of the chief of the locality. The clearing of the boundaries of the individual tenants followed this. The boundary clearing was accomplished by the help of a select committee made up of elders of the settlement. This committee served as an adjudication committee, which helped to settle all the boundary disputes between respective neighbours before the clearing team got to the disputed boundary.

The allodial boundary was then demarcated using boundary concrete pillars. The secondary and tertiary boundaries belonging to the main and the subtenants were demarcated using either of the following; plot concrete pillars, large wooden pegs, metal pegs and hedges as he case may demand. However some of the land parcels were bounded by natural features such as streams, Forest Reserves Stands (Santoman Forest Reserve) and already existing hedges. After the boundaries issues had been settled, the survey measurements commenced with the establishment of the controls on the allodial boundaries with the use of Total Station instrument. Points of departure for the traverses were provided through GPS surveys. The subdivisions were done using prismatic compass instrument to reduce survey cost. The cartographic preparation then followed. Large-scale maps of 1:2500 were constructed for the entire area. The cadastral plans showing all the existing parcels were digitised and a digital copy was produced in an ArcInfo environment.

To be able to construct a Land Information System (LIS) for the area, a comprehensive questionnaire was put together for the extraction of the necessary data to be captured. The chief, elders, settler (stranger) farmers, the district assembly and all stakeholders were approached during the administration of the questionnaire. The information extracted from the results of the questionnaire formed the basis of the attribute database for the LIS in an Arcview environment. The LIS for the locality therefore was made up of various data layers such as parcel boundaries, customary tenure (“abunu”, “abusa” etc.), other kinds of titles, names of farmers together with their family tree and agreed next of kin, water bodies and roads. Other information, which can be generated from the database, includes area, identifier, validity, individual parcel geometry, income and taxes etc.

4. RESULTS AND DISCUSSIONS

The result of the data acquisition during the ground survey and data extraction and utilisation during the creation of the LIS is a composite digital map of the Sefwi-Yamfo locality (Fig1).

The figure shows all the individual land parcels and all the other important features of the area. In the GIS environment, thematic maps such as roads, water bodies, settlements, cocoa farms can be generated to any required scale. Qualitative parameters of land tenure such as, legal security can be generated from the database (Fig2). One of the major problems of the landlord is succession to the tenant farmers especially the settler/stranger farmers.

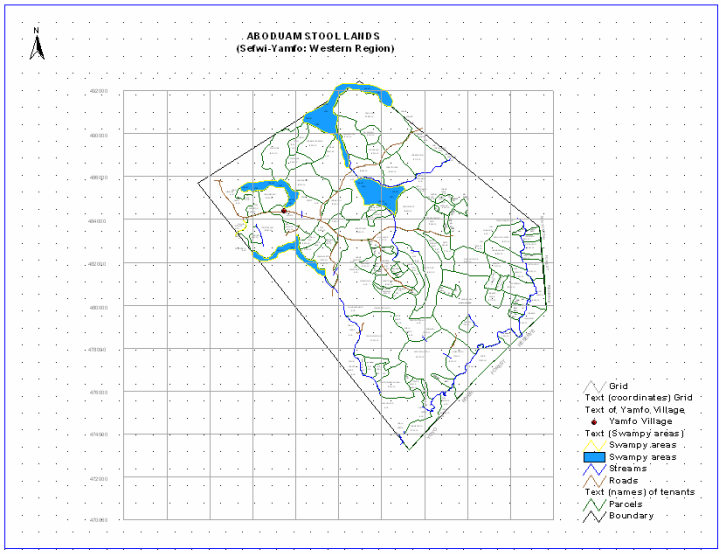

Fig. 1

Attributes of Parcels

Landlord_	Status_	Crop_	Acq_sc	Interest_	Acq_date	Lse_yrs	Exp_date	Rent_rcv
chief	native	cocoa	CHIEF	LEASE	19720406	40	20120307	663400.(
chief	non-native	cocoa	CHIEF	LEASE	19670904	31	19980805	218650.(
KWABENA DABANKA	non-native	cocoa	KWABENA DAB	ABUSA	19681106	31	19991106	82500.(
KWABENA DABANKA	native	cocoa	CHIEF	LEASE	19651112	28	19931013	204750.(
chief	native	cocoa	CHIEF	LEASE	19700721	23	19930621	71650.(
KWABENA DABANKA	non-native	cocoa	KWABENA DAB	ABUNU	19680311	26	19940210	281050.(
chief	non-native	cocoa	CHIEF	LEASE	19690723	31	20000623	308850.(
chief	non-native	cocoa	CHIEF	LEASE	19680318	31	19990318	92650.(
chief	non-native	cocoa	CHIEF	LEASE	19720512	32	20040412	203200.(
KWABENA DABANKA	native	cocoa	KWABENA DAB	ABUNU	19680404	31	19990404	74450.(
chief	non-native	cocoa	CHIEF	LEASE	19680519	24	19920419	154400.(
NANA BOAMAH	native	cocoa	CHIEF	LEASE	19690407	29	19980309	294350.(
chief	native	cocoa	CHIEF	LEASE	19690407	23	19920308	145150.(
chief	native	cocoa	CHIEF	LEASE	19711108	31	20021009	294000.(
chief	non-native	cocoa	CHIEF	LEASE	19721202	23	19951103	87400.(
KWAME KETU/ERIC ARTHU	native	cocoa	CHIEF	LEASE	19721129	23	19951031	145150.(
chief	native	cocoa	CHIEF	LEASE	19700912	21	19910814	34900.(
chief	non-native	cocoa	CHIEF	LEASE	19680404	21	19890306	37350.(
chief	non-native	cocoa	CHIEF	LEASE	19700501	21	19910402	45100.(

Fig. 2

To solve this problem the next of kin of every tenant farmer is documented and stored in the database as part of the family tree. At the moment only the names of the family members are stored. However efforts are being made to customise the Arcview software to store the pictures of the individuals as well as to provide sufficient identification to the chief or the landlord during such transitional situations.

The system is able through customisation to generate individual cadastral plans for respective tenants so that they can be used for land registration and other land transactional purposes. Another important functional aspect of the system is its ability to calculate levies or taxes on the land holdings to both the landlord and the district assembly as per the size of the land holdings. In this manner the constant tension between tenant and landlord over the amount of levy to be paid annually is avoided. This is because now the actual area of the land parcels, the age and condition of the cocoa farm holdings are exactly known and therefore, once the

levy per acre is established, the calculations are automatically done. The system also provided a facility for constant updates especially in situations such as subdivision of plots, land use changes and renegotiation of leases after expiration.

5. CONCLUDING REMARKS

The project has provided greater security of tenure for both the indigenes as well as the settler/stranger farmers who until now were very venerable to manipulations by the landlords. By the provision of the cadastral plans duly signed by the Director of Surveys, licensed surveyor and endorsed by the chief, the farmers now have in their possession evidence of collateral which they can use to access credit from the financial institutions to improve their farming activities.

The construction of the digital composite map of the locality will provide a lot of information for planning and land management by the statutory authorities in the district assembly. Indeed it will be easy to integrate the system into the systematic land title registration exercise embarked upon by the Ghanaian government since 1986 and being continued through the Land Administration Project (LAP). The peace and harmony it has brought between the farmers especially the settler/strangers and the landlord on one side and between the settlers and the indigenes as a result of the documentation of their rights or title to the land they farm cannot be overemphasised. It is believed that one of the remote causes of the conflict in La Côte d'Ivoire had been the dispossession of land belonging to settler farmers by landlords in the south. It is hoped that this project could be extended to the rest of the cocoa growing communities where there is a prevalence of settler farmers since it provides improved access to land and its resource in this case cocoa which is the live wire of the inhabitants.

Its is worth noting that the financing of the project has been by both the landlords and the tenant farmers. This arrangement is recommended to be encouraged in all cases of cadastral development so that it becomes self-financing. It appears that this is the surest way of building the national cadastre instead of waiting for government or central funding, which is always very slow coming.

It is also recommended that perhaps instead of ground surveys which is time consuming and relatively expensive, sub-metre resolution satellite imagery be used to cut down on cost and time whenever possible.

ACKNOWLEDGEMENT

The author wishes to acknowledge Mr. Hanan Iddrisu and Yeboah-Kodie Wilfred, final year students who helped in the data collection and analysis as part of their final year project. I also wish to thank Nana Kwabena Aduhene, chief of Aboduam for allowing his locality to be used for the pilot study.

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