URBAN PLANNING & LAND MANAGEMENT CHALLENGES IN EMERGING TOWNS OF ETHIOPIA: THE CASE OF ARBA MINCH

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Abstract: Sustainability of urbanization requires planned development of urban centers, competent institutional frameworks in place and proactive management and governance strategies. In light of this, the paper examines the practice of master planning and the extent of its implementation and challenges of land management in Arba Minch as emerging regional town in the Southern Nations Nationalities and Peoples Region (SNNPR). The data for the study were generated by household survey of 340 household heads selected through systematic sampling, key informant interview with individuals actors in planning, management, informal land transaction in the town. Personal observation and extensive review of various policies, plans, and directives was made in order to assess the issues planning and management of urban land. The paper revealed that the master plans prepared so far for the town have been implemented; however, could not adequately achieve the primarily intended goals such as joining the two settlements i.e. Secha and Sikella in the first master plan, for instance. The study also showed that archaic land information management system, informal land acquisition, corruption, land speculation and land related conflicts have become the challenges of land management in the town. These problems are associated with top-down planning process and, weak institutional frameworks. These all imply that there is an urgent need for giving adequate attention to the planning approaches and management systems of urban land before things get out of control as it is the case with the oldest urban centers of varying size in Ethiopia. Therefore, the concerned bodies who are responsible of planning, implementation and management of land have to be curious whether what is being carried out is intended to bring sustainability or otherwise. This is mainly because the growth of the town is irreversible and the town is continue to expand spatially, socially and in economic spheres which all together will pose unforeseeable challenges.

Keywords: Master planning; land management; urban sustainability; emerging towns.

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INTRODUCTION

Urban areas, mainly of developing countries, are growing largely at unprecedented and challenging pace and rapidity by posing serious challenges. Since they are places where challenges and opportunities of development meet, they need to be adequately planned and effectively guided by these plans in order for enabling their expansion, functional specialization and cultural expression and above all sustainability (Devas & Rakodi, 1993). Therefore, urban planning is an important tool to guide the growth of urban areas elsewhere. However, challenges and priorities of planning exercises are different (UN-Habitat, 2009). The planning tradition of most of African countries followed the European tradition owing to the past colonial history of the continent (Devas, 1993).

The relatively long tradition of planning practice in Eastern Africa indicates that there is an understanding of physical land use planning which mainly comprised of master planning, planning and building standard and regulation and a system of development control. Master plans, sometimes named as 'end-state' plans or 'blue-print' plans, refer to the physical plans that depict on a map the future scenario of the town when the plan is fully implemented (Hirasskar, 2007). However, master plans have been critiqued by scholars and practitioners for the fact that they are rigid, top-down, professional and technocratic exercises with little or no participation of masses. Hence, structure planning preferred to master planning, this is more flexible than that of master planning. Yet, master planning practice tends to dominate the planning practice of developing countries and that of East Africa in particular. Whatever maybe the case, master plans help guide urban development and expansion (Devas, 1993).

It has been observed recently that in Ethiopia urbanization is taking place at a much faster pace than population growth owing to decentralization (regional and municipal decentralization) in the post-1991 period (Gulyani, et al, 2001). Even though the rate of urbanization is the highest for Ethiopia compared to African countries; yet, it is the least urbanized and at the same time its most urban centers are predominantly unplanned i.e they came into existence by historical accident. The predominance of spontaneous development urban centers in Ethiopia has been posing a substantial need for planning intervention for urban centers of Ethiopia (Birke, 1997). Therefore, it is evident that master planning is very vital for urban development and management in Ethiopia and elsewhere.

Though Ethiopia is one of the least urbanized countries in Africa; its rate of urbanization is quite dramatic. In Ethiopia, after the Federal Government has a vested interest in the issues of land, planning for urban centers is made by the National Urban Planning Institute (NUPI); but the urban centers in the country are supposed to be managed by their own town administrations and municipalities. Municipalities are local governments in relatively bigger urban centers in Ethiopia. Among different roles and responsibilities of the managing and governing bodies, in different-sized urban centers, the central issue of the municipal task is the management of urban land. This is the most challenging task planning and managing bodies because there are competing and conflicting interests with respect ownership and use of urban land (Birke, 1997; Gulyani et al., 2001).

Arba Minch was very much fortunate to have master plans right from its establishment in the 1960s as a town; unlike many other older towns of Ethiopia which have been spontaneously developed and continue to pose challenges for planning and management. Consolidated research works in the area of land use planning and management are lacking in the town. Some of the studies made are sporadic which were focusing on some specific issues like housing, waste management and the like. For instance, studies made by some researcher of urban management mainly focused on Residential Land Management (Dimire, 2008) and Rental Housing Management (Atnafu, 2008). This is an indication that there is paucity of the ready-to-use studies and consolidated information for management of land in the town. Against this backdrop, this study is aimed at dealing with land use planning and management practices & problems in Arba Minch town. Hence, the study on master planning and management is intended could fill the knowledge and information gap in the implementation of master planning and also could help managers, decision makers and other stake holders in master planning and management by providing valuable information about the missing but important element.

Therefore, the central theme that need to be addressed in this particular study include the issue of master planning, land management and their implications for urban sustainability in Arba Minch town. Thus, the questions that need to be addressed in this study include the following: (1) To what extent the master plans so far prepared for Arba Minch town were effective? (2) What are the challenges of land management in Arba Minch town? (3) How master planning and land management activities are institutionally organized? (4) What is the implication for future planning and management exercises in the town?
**Objectives of the study**

The general objective of this research was to assess the practice of master planning and challenges of land management in Arba Minch town, Southern Nations, Nationalities and People’s Regional State thereby pointing its future implications for sustainability. More specifically, the study was intended to:

- Assess the extent to which master plans prepared for the town attained the objectives in the town
- Identify the challenges related to land and their management status in the town
- Discuss the institutional frameworks and arrangements for master planning and land management in the Town
- Indicate the implication for the future planning and management practices with respect to the urban land in the town.

**METHODOLOGY**

**Study Area**

Arba Minch town is one of the emerging towns of Ethiopia which is located in Southern Nations, Nationalities and Peoples regional state of Ethiopia. The name Arba Minch was derived from the “forty springs” which means a collection of more than forty springs which are located in the Arba Minch natural forest. Astronomically Arba Minch is located at 6°04′ North Latitude and 36°40′ East Longitude. It is found in Gamo Goffa zone and used as a zonal capital of the zonal administration in Southern Nation’s Nationalities and Peoples Regional State of Ethiopia. It is located at about 505 km south of Addis Ababa and 275 km of Awassa, the regional capital (Arba Minch Municipality (AMM), 2006). Arba Minch is a town in Southern Nations, Nationalities and People’s Regional State. It consists of the fouradministrative sub-cities namely Secha, Sikella, Abaya and Nechsar and these four sub-cities are divided into eleven kebeles. According to Central Statistical Authority (CSA) (2008), Arba Minch has a total population of 74,843, out of which 39,192 were males and 35,651 were females. Its annual average growth rate of population between the Second (1994) and Third (2007) Ethiopian censuses is 4.8% per annum.

**Study Design**

The research was conducted and the data were generated in 2008/9. It was based on both primary and secondary sources of data set. The primary data was collected from direct interviews with individuals who are directly related with planning, management, allocation of land (individuals from institutions, departments and the municipality responsible for land use planning and management of the town) and persons who lived for long in the town; personal observation and response to questionnaire administered in a household survey for 340 sample household heads selected from the four sub-cities of town.

The sampling procedure was based on the data obtained from the Arba Minch town Municipality which contains a detailed kebele (neighborhood) population. First, randomly, the four kebeles namely Chamo, Mehal Ketema, Dil Fana and Kulfo were selected which were representing the old and new settlements. The numbers of households were determined by proportional allocation and were selected using systematic sampling. Based on the response rate, 10.2% of the total households of the study population were involved in the survey. Since document review is equally important method of data acquisition, secondary data was obtained from various institutions and offices.

The data collected via survey, key informant interview, observation and document review were analyzed by employing descriptive methods and to some extent using tables and simple statistical techniques such as tables, percentages and maps. Despite the efforts made to triangulate the research using data from various sources; this research is not out of limitations.

**ANALYSIS AND DISCUSSION**

**Assessing of Master Plans of Arba Minch**

Unlike many other towns of Ethiopia, Arba Minch was fortunate enough to have a master plan as soon as its establishment as a town with an estimated population less than 3,000 inhabitants. Thus, the first master plan for Arba Minch was prepared by Mr. Powell in 1963. Mr. Powell was professional town planner who was working for the Ministry of Interior at the time (NUPI, 1989). Accordingly, the main aim of this master plan was the joining of the two separate settlements (i.e. Secha and Sikella) and thus creating a sole town known as Arba Minch. Functionally, this plan was mainly developed/prepared for residential and administrative purposes (NUPI, 1989).

The second master plan for the town was prepared in 1967. The Italian town planning consultants (CISU) prepared the second master plan for Arba Minch town in the mentioned year. According to NUPI (1989), like the Powell’s master plan of the 1963, this master plan also envisaged the joining of the two settlements or parts of the town (i.e. Secha and Sikella) together as its main objective. Therefore, with this plan the two parts
(Secha and Sikella) started to be considered a sole town, Arba Minch.

The 1967 master plan for Arba Minch town was revised and modified in the year 1980. This plan was a bit detailed than the previous ones and which was revised by the Ministry of Urban Development and Housing (MUDH). This plan was prepared at relatively larger scale hence detailed than the previous ones i.e. it was prepared at the scale of 1/2500. The 1980’s revision and modification introduced the parcellation plan. The parcellation plan was mainly for areas in between the two centers (i.e. Secha and Sikella) and the southern part of Sikella (NUPI, 1989). This detailed plan was used and the important parts of it were incorporated into the 1989 master plan particularly concerning road-network and the distribution of some residential areas.

The National Urban Planning Institute (NUPI) had prepared the third master plan for Arba Minch in 1989. This master plan envisaged the centre of the town to be at its geographic center though had limited implementation. The main limitation of this plan was that it was prepared only at the scale of 1:10 000. Failure to prepare detailed plans of this master plan made its implementation very difficult. Because of this difficulty, in consequence, most part of the development trend of the town followed the 1980 modified and detailed master plan of MUDH. The time frame of this master plan was for about 7–8 years with the specified objectives in guiding the expansion and development of the town for the specified years. Land use category of the town in the master plan of 1989 could be seen from Fig. 1 below.

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Fig. 1 The Land Use Map of Arba Minch town (1989).
Source: Ministry of Works and Urban Development/MWUD
In 1995 the National Urban Planning Institute (NUPI) has prepared another master plan for Arba Minch town based on the analysis of the cumulative effects, achievements and failures of the previous plans. Unlike the previous plans; this master plan includes the two self-sufficient, isolated settlements located north and south of Kulfo River. According to this plan, the existing two parts of the town (Secha and Sikella) of Arba Minch town and the scattered settlement between the two was consolidated to form reorganized districts into a single town. The previous plans had the aim of joining the two parts of the town. However, this master plan envisaged the two towns to develop following natural development trend as peripheries to both Secha and Sikella. The town was planned to have a semi-circular development of settlements at their edges. The center of the town was planned to be shifted to both banks of Kulfo River. Common services and administrative buildings which receive frequent visits were planned to be located within or near to the center as much as possible.

Institutional Frameworks for master planning and land management

The planning approaches involved for the preparation of master plans for Arba Minch town was clearly and dominantly “top-down”. For the preparation of five respective master plans of the town, the central government was responsible. The first master plan was prepared by a town planner from the Ministry of Interior. The second master plan (1967) was prepared by the Italian town planning consultants under the supervision of the central government. The second master plan of the town was revised and modified by the Ministry of Urban Development and Housing (MUDH). The last two master plans (1989 and 1995) were prepared by the National Urban Planning Institute (NUPI). From these all planning experiences for the town, it is possible to conclude that the planning approach was typically “top-down”, which mainly focused on Survey-Analysis-Plan-Implementation approach of master planning. This method did not give adequate room for community participation or consultation in the process of planning (either in planning, implementation, monitoring and evaluation).

As the preparation mandate of the master plans was dominated by the central government, the implementation, monitoring and evaluation mandate was at the same time controlled by the central government. The latter issue is less practical in reality even though the mandate was of the central government. Insignificant rooms were given to the local government (Zonal, Woreda administrations) and the municipality to deal with such matters.

Appropriate institutional framework along with other relevant factors helps to facilitate the efficiency and effectiveness of urban land management particularly by using transparent procedures, coordination and cooperation between and within institutions (Birke, 1997; UN-Habitat, 2009). The relationship between Arba Minch Town Municipality and Arba Minch Town Administration is essentially political. Thus, the Town Administration controls the activities of the Municipality from political perspectives. That means if some activities of the municipality

<table>
<thead>
<tr>
<th>No</th>
<th>Master plan</th>
<th>Time Frame</th>
<th>Prepared/revised by</th>
<th>Main Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The 1963 master plan</td>
<td>-</td>
<td>Mr. Powell</td>
<td>Joining Secha &amp; Sikella</td>
</tr>
<tr>
<td>2</td>
<td>The 1967 master plan</td>
<td>20 years</td>
<td>CISU</td>
<td>Joining Secha &amp; Sikella</td>
</tr>
<tr>
<td>3</td>
<td>The 1980 master plan (Revised)</td>
<td>-</td>
<td>MUDH</td>
<td>Parcellation plan</td>
</tr>
<tr>
<td>4</td>
<td>The 1989 master plan</td>
<td>7-8 years</td>
<td>NUPI</td>
<td>Envisages the center of the town to be at its geographic center</td>
</tr>
<tr>
<td>5</td>
<td>The 1995 master plan</td>
<td>10 years</td>
<td>NUPI</td>
<td>Shifting the center to both banks of Kulfo river</td>
</tr>
</tbody>
</table>

Source: NUPI (1989; 1995)
carried out by the Cadastre Unit of the Land Administration and Supply Agency of the Arba Minch Municipality. Land registration in the town has started two years after its establishment as a town in 1965. However, the problem is that yet the exact number of plots in the old registration system was not known. This clearly shows poor registration and documentation and data management system of the town owing to weak technical, financial and human resources, lack of coordination and commitment of different stakeholders in the area of land information management in the town. Even at present data on land in the Arba Minch Municipality are disorganized and not standardized so that it can be used for decision making, conflict resolution and in general the management of land in the town.

The Municipality of Arba Minch town has started cadastral survey of the town since 2007 and yet completed surveying only for two sub-cities i.e. Secha and Abaya. The information included in the survey are locational, socioeconomic and building characteristics. However, according to Mabogunje (1992), a cadastre is expected to record the coordinates of the parcel boundaries. In Arba Minch town, the cadastral team uses old plans, subdivision plans for undertaking the survey. For cadastral survey large scale maps are required, usually at the scale of 1:1,000. What can be understood from the above discussion is that land registration, documentation and cadastral survey of Arba Minch town is at infancy level. Even though the initiative of undertaking the cadastral survey (a half-way cadastre) is a rewarding endeavor in the town; however, there are many factors that bottleneck the effort.

Solid Waste Management

The absence of proper management of domestic, municipal waste is a serious problem in Arba Minch town. However, solid waste management has so far received very less attention from the government. So, Solid waste is a potential health and environmental risk in Arba Minch town. The municipality has a very less preparation for solid waste management in the town. In this regard it organized the solid waste service which only covered 900 houses along main roads. The service has not been extended to the center/inner/ area of the town (AMM, 2008). Field observation of the existing situations in the town shows that the dwellers of the town use different dumping sites. For instance, some residential houses handle house-hold solid waste by just dumping at sites along the road or into a nearby ditch or valleys and others regularly dump their residential solid waste at the near side of their houses and in rivers or burn it in their compound or nearby.

As per the study by ROSA (2007) the municipality has faced a problem in finding a location for disposing the solid wastes. Here, the question of land use planning comes as an important issue of consideration. The solid wastes are disposed in open dump near Kulfo River in Sikela town and in gorge near the town premises at Secha. The resultant pollution (by Kulfo River) of the lakes (Abaya and Chamo) endangers the lakes biodiversity (particularly fish and crocodile) which were sources of income for the area.

In the past the town administration has bought four storage bins for collecting solid wastes. At present these bins are full and have been emptied and turned upside down, not used. So residents litter waste around the bins causing serious health and environmental problems in the town. This serious problem calls for proper urban land use planning and management in the town.
Land–Related Conflicts and management

The information on land use conflicts was obtained from the Arba Minch Town First Instance Court. Semi-structured interview questions along with format were prepared to access data from the court on aspects of land conflicts in the town for the last four years (1997–2000 E.C). As it can clearly observed, the number of reported cases of land use conflicts in Arba Minch town are increasing. Thus, in the year 1997 E.C. when the court started its function, the number of reported cases of land use conflicts was only nine out of which six were resolved and the remaining three transferred to the next year. In the year 1998 E.C, the reported cases were more than quadrupled (42), out of which 34 resolved and the remaining transferred to the next year. In the year 1999 E.C, the number of reported cases increased to 147, out of which only 52 were resolved and the remaining transferred to the next year. By the same token, in the year 2000 E.C, the number of reported land conflicts in the town increased to 173, out of which 87 were resolved where as the remaining 87 cases not resolved, transferred to the next year.

Thus, it is clearly observed and understood that the cases of land use conflicts reported to the court are increasing at increasing rate which is becoming an important issue of concern of the court of the town. According to the Work Process Expert of the court in the Registry and Statistics Section of the court, the major causes, for the reported land use conflict cases in the town were mainly associated with the management of land information system of the municipality. In this regard, more specifically, land registration and particularly, title deed registration with double issuance of title deed for a single plot. The other cause is boundary transgression of neighbor plot holders and selling of the single plot for two or more individual by using illegal and informal channels of land transaction in the town.

Note: Dates in Ethiopian Calendar (E.C), on the average, lag about seven to eight years from the Gregorian Calendar (G.C).

Methods of Land Acquisition by Residents

Method of land acquisition is an important element to study land management aspect of the town. The method by which land is acquired by respondents in Arba Minch town is given as follows. Accordingly, nearly 2/3rd (64%) of the respondents acquired their land through municipal allocation where as 19.78 % obtained their land through informal land transactions, and 12.76% acquired through inheritance from relatives, 2.94% have got it by renting and the remaining 1.18% acquired through gift from relatives/friends. Table 2, presents the method of land acquisition by respondents in Arba Minch town.

From the method of land acquisition one can easily understand that informal land transaction is in the second place which is one of the most important method of land acquisition in Arba Minch town. This might be associated with either the shortage of land to be provided and to satisfy the demand for land or the failure of the municipality to satisfy through the formal channel of land delivery system. In principle, according to the rules and regulations, land transaction between individuals is prohibited. But, what is sold and bought is the property; not the land, on the land and then transferred to the buyer by the municipality. Then, the buyer becomes the owner of the property thereby the lessee of the land, for example, for 99 years if it were for residential purpose.

<table>
<thead>
<tr>
<th>Method of land acquisition in Arba Minch town</th>
<th>Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inheritance</td>
<td>Count</td>
</tr>
<tr>
<td>Informal land transaction</td>
<td>67</td>
</tr>
<tr>
<td>Municipal allocation</td>
<td>218</td>
</tr>
<tr>
<td>Gift from relatives/friends</td>
<td>4</td>
</tr>
<tr>
<td>Renting from person</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>340</td>
</tr>
</tbody>
</table>

Informal Settlement and Land Management

Informal settlement in the form of squatters and illegal settlements has been observed in Arba Minch town particularly in Sikella, Secha and Abaya sub-cities. The extent of informal settlement in the remaining two sub-cities of the town was minimal. Expansion of illegal settlements in the town is one of the major emerging land use planning and management problems facing the municipality; even though it is not a widely observed phenomenon. According to the Head of Land Administration and Supply Agency of the municipality, for instance, during the years 1995–1999 E.C., on average, 300 squatters were registered in each year. Within the years mentioned, totally there were 1,500 squatters registered (Dimire, 2008).

To combat and control the problems of squatter settlements in the town, the municipality has taken measures. These included demolishing and regularization of these settlements. Accordingly, from 1995–1999 E.C., out of 1,500 registered squatters, 1000 were demolished, 150 were regularized and no decision was made on the remaining 350 squatters. Closely related with the problems of informal settlements in Arba Minch town, was illegal occupation of land for residential housing construction. In this regard, the measures being taken in the town were demolishing, expropriation of property and legal punishment.

Informal Land Transaction and Land Speculation

As Mabogunje (1992) observed from the nature of urban land market situation of Sub-Saharan Africa, “the constraints of making land easily available through the formal governmental mechanism were such as to force people, desperate to provide themselves with shelter, to seek other avenues of gaining access to land”. Due to this the informal market is dominant in matters of land transactions and transfers elsewhere in Sub-Saharan African countries. However, the challenge with respect to the study of informal land market is the lack of information. In particular there is lack of information as to the volume of transactions, those who involved in, their general pattern and distribution within the town, and their prices.

For this particular study, respondents who got land through informal land transactions were asked to specify the reason why they bought it. Accordingly, the majority (more than half) of the respondents reported that they bought the land because of the delay of the municipality to provide land, 17.91% bought for the fear of losing the lottery or chance of getting plots, 14.93% were uncertain about the municipality to give them land and the remaining 11.94% bought land through illegal channel for other reasons.

With the expectation of getting more profit from land people in the study area are applying to obtain land from the municipality second time or third time. This is one of the reasons for the delay of land acquisition because the municipality has the responsibility to make sure that an applicant has no land in the town obtained through any channel of land acquisition.

Key informant interview with the land brokers, land buyers, residents and different experts has confirmed the prevalence of huge volume of informal land transaction and the preference of it by many of those who look for land and able to afford. Thus, from the situation above, it is possible to identify actors and beneficiaries in the informal channel of land transaction. Thus, the informal actors are land holders (speculators), land brokers and land buyers. Land holders and land brokers benefit more because of the price of land and the demand for the land is ever increasing in the town from time to time.

Conclusion and Recommendations

Managing the urban land has become a serious challenge since it is the space over all urban activities carried out. This makes planning and management of the town very vital. With this view, this research is undertaken with the aim of assessing the land use planning and management practices and problems in the Arba Minch town as a newly emerging regional town of Ethiopia.

It has been understood that the master plans for Arba Minch town could not adequately achieve the primarily intended goals. However, the attempts were made to guide the development and expansion of the town in the course of its development and expansion mainly allocating for various functions; not for the intended spatial development. The preparation of the master plans was centralized being a top-down, based on Survey-Analysis-Plan-Implementation process, professional exercise with giving little emphasis on the existing and evolving situations of the town, insignificant or very limited community participation or consultation.

Urban land management is closely linked planning for management has to precede planning. In Arba Minch, land management challenges such as land – related conflicts, arcaic land information management, informal land acquisition, proliferation slums and squatters and land speculation. These all call for improving the planning and management of urban land in the town. Fortunately, while this research was conducted, the SNNPR Bureau of Works and Urban Development together with the town began the preparation of structure planning. Moreover, the researcher recommends that efforts need to be made to make the planning and implementation process participatory, all-inclusive and collaborative enough so that the sustainability of the town will be ensured, competent and responsible institutional frameworks for
responsive and proactive management land and land-related issues of the town. Finally, it is stressed that there should be proper monitoring and evaluation strategies in place in order for responding to the emerging and evolving challenges of plan implementation and land management in the town.

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