

Impacts of Urbanization on Neighboring Agricultural Communities Livelihoods: The Case of Gimbi Town, West Wollega Zone, Oromia Regional State, Ethiopia

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Abstract: *The purpose of this study was to examine the effects of rapid urbanization on livelihoods in the peri-urban areas of Gimbi town. The study focused on three of the peri-urban communities that surround the town of Gimbi, namely Choli, Wara Sayo and Melka Hola. The study took on a survey design which involved both quantitative and qualitative analysis of the effects of the town's growth on the livelihoods assets of residents. 144 household heads were selected using simple random sampling technique from three neighborhoods which were chosen purposively. The major impacts of town's expansion in the study area included farmers' displacement, expropriation of croplands, compensation problems, social and environmental problems. The major findings of the study indicated that urban expansion program around Gimbi town was not participatory, people were not given awareness, leaders and representatives were not consulted formally or informally. With regard to natural capital the town's expansion resulted in a total loss of 52.1, 12.1 and 10.9 hectares crop, forest and pasturelands respectively. With the decline in these land holdings, the production of livestock has also declined. In addition, the communal social networks which enable residents to extend mutual support to one another in times need has declined. Furthermore, results obtained from the investigator field observation indicated notable deteriorations in the peri-urban environments. The physical growth of the town should be managed in a manner that protects the natural environment.*

Keywords: Urbanization, Agricultural Communities, and Livelihood, Peri-urban

1. Introduction

The world is undergoing the largest wave of urban growth in history. Over the past 50 years the urban population of the world has increased by 3.3 billion people. By 2030 this number will swell to almost 5 billion, with urban growth concentrated in Africa and Asia and about 80% of the urban population will live in these developing regions. To accommodate this rapid growth of urban population an estimated 125 million hectare of land or about 10% of the potential crop land of the developing countries may have to be converted to urban use (UNFPA, 2007).

According to Wehrman, (2008) the rapid urban population growth in developing countries is resulting in uncontrolled changes in land use and ownership and urban boundary expansion into the transitional peri-urban agricultural areas.

Wehrman, (2008) further noted that sub-Saharan cities are currently experiencing the world's highest rate of urbanization. A vast number of people migrate towards the peri-urban areas, changing the use of the land and its ownership, which often implicates a change of the land tenure system as well.

Like that of most developing countries, urban centers in Ethiopia are growing and over spilling into the peri-urban agricultural areas in terms of space and population. Even though the status of urbanization is the lowest with only 17% the total population residing in urban centers, the current annual urban growth rate is one of the most rapid which is about 6 %. Estimation by UN also shows that

Ethiopia's urban population will triple between 2010 and 2040. Preliminary city-level population projections suggest that some of Ethiopia's large cities will be much more than triple by 2040 (UN-Habitat, 2010).

Further, UN Habitat noted that urbanization in Africa is moving from city-based to region-based configurations i.e. peri-urbanization, meaning that there is growth and expansion outwards i.e. more spatially. In the process of spreading out, it engulfs surrounding rural land and adjacent towns, UN-Habitat, (2009). Growth/overspills towards the peri urban areas are also a result of harmful growth patterns experienced in the cities, likewise of land and degradation of their physical structures.

Ethiopia, has 9 regional and nationally recognized zones; with each of them having their own capital 68 (UN, 2000). West Wollega zone is one of these zonal states, which is located in the western part of Ethiopia, and its capital is Gimbi town. Gimbi, the capital town socio-economic and political center of West Wollega Zone is currently experiencing rapid urban expansion and population growth. At the beginning of its formation (1937) the town had occupied a small center and in1991 it had grown to 280 hectares of land (Gimbi Town Administration, 2014). After a decade the area of the Town had increased to 2,520 hectares.

At present, the town occupied over 4943 hectares of land coverage (Gimbi Town Administration, 2014). Its expansion to its urban boundary was aggravated by its population growth. According to the CSA (2014), the town had the total population of 14,259, 20, 462, 30, and 981 in 1984, 1994 and 2007 census years. Currently, the town had

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the total population of 41,328 (Gimbi town administration). Therefore, the consequences of these ongoing trends of urban expansion on the surrounding need to be studied to reduce the negative impacts and thereby to maintain their well being.

The rural communities have little knowledge and know-how to cope up with the situation of urban living conditions since majority of rural neighboring farming communities are uneducated and unskilled to compete for urban job opportunities (Adam, 2010). As a result, most of the households who lost their farmlands to the expansion could be exposed to impoverishment. Specifically, those farming community who possess their own farming land that provides them sufficient livelihood can be exposed to economic and social problems that lead them to impoverishment.

The general objective of the study was to investigate the impact of urban expansion on livelihood of the farm households in the outskirts of Gimbi town.

2. Methodology

Astronomically, the town is located at 9° 5' N - 9° 15' N latitude and 35° 48' E - 35° 55' E longitude. This study employed survey method specifically a cross sectional research design. The study area, Gimbi town is surrounded by six rural neighbourhoods. In order to select and determine the sample from the six rural neighbourhoods, purposive sampling technique was employed based on the magnitude of the town expansion program. Accordingly, three neighbourhoods, namely Choli, Wara Sayo and Melka Hola were selected on the basis of the author's judgment. In these three neighbourhoods there are 225 affected households which were obtained from the municipality administration to form the sampling frame. Following the sampling frame, the researcher employed simple random sampling technique to select 144 household heads from the three neighbourhoods out of 225 affected households.

3. Evidences for the Expansion of Program

There are many indicators that show the intensity of the expansion and the related problems in peripheral areas of Gimbi town. They include loss of the farmer's agricultural lands to the investment, infrastructural development and settlement purposes. Likely, eviction of farmers and loss of livelihood sources, problem in the implementation of procedural requirements during expropriation and compensation are other indicators of the expansion programs.

3.1. Farmers displacement and expropriation of crop lands

The Table 1 below explains the number of displaced households and farmland expropriated.

Table 1: Total affected households and area taken in hectares

Study area	Total affected Households	Area (hectares)
Choli	45	22
Wara Sayo	56	27
Melka Hola	43	25
Total	144	74

Source: Field survey, 2014

As depicted in Table 1, 74 hectares of farmlands has been converted to urban land use from the selected 144 sample households between 2009 and 2013. In this case the majority of the, agricultural land in the peri-urban areas of Gimbi town will be likely to be converted into urban land use within few years. As it is indicated in the table more land was lost from Wara Sayo peri-urban agricultural communities. Likely, more farmers were affected from Wara Sayo as compared to the two other study sites.

3.2. Land acquisition

An attempt has also been made to assess the purposes of the expropriated land in the study areas. The data revealed that more land were taken for infrastructure, settlement, and investment purposes.

Table 2: The purposes of recently acquired lands (2009-2013)

Sr. No.	Use of recently acquired lands	Hectares of land engulfed	
		F	%
1	Investment	15	20.27
2	Infrastructure	28	37.84
3	settlement	31	41.89
Total		74	100

Source: Gimbi Town Administration, 2014

Gimbi town expansion has direct impact on the life of neighbourhoods that entirely depend on agricultural production. In many neighbourhoods around the town, the increasing demand for urban land use is most likely to affect rural-urban fringe areas. As seen in Table 2 settlement, infrastructure, and investment land acquisition has accounted for the loss 41.89 %, 37.84% and 20.27 % rural farm lands respectively.

According to the FGD (Focus Group Discussion) participants and the key informants, the major reason for the highest expansion of the town was the establishment of Wollega University Gimbi Campus, Ethiopian Commodity Exchange (ECX), its zonal capital request of the people for residence and investment around the Gimbi town.

In addition, Gimbi town is crossed by the Addis Ababa-Assosa, Addis Ababa Dambi Dolo and Gimbi-Nole road. These three main roads enabled the town to have business trade connections with more than 90 districts in the east, west and Kelem Wollega as well as with Beni Shangul Gumuz Regional State. These factors aggravated the demand for land acquisition in the neighborhoods of Gimbi town. The study of Wubante (2013) supported this finding. According to his study conducted on land acquisition for urban expansion from peri-urban areas and

its impacts on peri-urban land and livelihoods in Ethiopia, Ethiopia like elsewhere in the sub-Saharan region, urban growth strategy is primarily based on compulsory expropriation of peri-urban agricultural land from local peri-urban farmers.

Based on the data obtained from the town administration, the opinion of the FGD Participants and the key informants, the investigator understood that if the towns continue to grow at the present rate, all the farm households along the town's border will be landless in the near future. Likely, the majority of the households who entirely depend on agricultural practice and have no skill of other jobs rather than farming will become jobless while those who have the skill of trade related activities will become prosperous.

3.3. Consequences of Gimbi Town Expansion

3.3.1. Physical and financial impacts

The most important type of physical capital that has made possible for affected households were electricity, market, road and clean water.

Table 3: Services obtained before and after town's expansion

Service obtained	Before				After			
	Yes	%	No	%	Yes	%	No	%
Electricity	9	6	135	94	100	69	44	31
School	-	-	144	100	132	92	12	8
Market	-	-	144	100	135	94	9	6
Road	-	-	144	100	132	92	12	8
Clean water	-	-	144	100	120	83	24	17

As it is depicted in Table 3 access to electricity, road, clean water and market were supported by 69%, 92%,

83%, and 94% respectively. Access to road was the most significant infrastructural development in peri-urban areas of Gimbi in the last five years. As depicted in Table 3, the majority the respondents 69% and 92% were access to electricity and road respectively. The extension of electricity have contributed to the villages attractiveness to investment and residential development.

The town's road construction project involved in reshaping and paving the badly deteriorated feeder roads that connected the town with these villages. Following town's expansion, concrete road that connected Gimbi town with Gambela , Wadabo , and Biklal via Choli, Melka Hola and Wara Sayo were established. Before the establishment of these concrete roads, the residents travelled to Gimbi had walk on their foot for 6-10 km. But now as one respondent from Choli put it "You can easily get to Gimbi town any time of the day even in the night as there are many Bajaj, Mini Buses and other vehicles on the roads". Likely, 92% were access to education after the town expansion to the areas. Similarly, the majority of the respondents 83% and 92 % were access to clean water, and market respectively.

With regard to financial capital, 10 (7%) out of 144 sample households had a bank account while 93% had no saving account. In addition, many of the three study sites household respondents had no aware of institutional credit. As it is shown in, Table 4 only 17% had obtained credit from financial and saving institutions. Due to lack of access to information on financial and saving institutions, the majority of the affected farmers 93% did not have a bank account. When they were asked how they were able to construct the house on the plot they obtained they replied that compensation money was the main source for either construction or to fulfil their livelihoods.

Table 4: Financial Impacts

Study site	No. HHS who have saving account					No. HHS obtained bank loan/ credit				
	Yes	%	No	%	Total	Yes	%	No	%	Total
Choli	3	7	42	93	45	7	16	38	84	45
Wara. Sayo	5	9	51	35	56	8	14	48	86	46
Melka. Hola	2	5	41	95	43	9	21	34	79	43
Total	10	-	134	-	144	24	-	120	-	144
%			93		100	17		83		

3.3.2 Socio-economic impacts

This section deals with socio-economic impacts of the urbanization on Gimbi town affected.

Households. Core livelihood activities which were mainly on-farm were supported by a network of social capital practices (Meikle, 2002).

Social network is instrumental in enhancing financial assets especially during emergencies; raising money to pay school fees or help during funeral or in development activities, labor contribution especially in tending farms during the farming season or cash contribution. In this section the socio- economic impacts were discussed.

Table 5: Socio- economic problems of the affected farmers (multiple response is possible)

S. No.	Socio-Economic Problems	Responses of Sample Household Heads	
		F	%
1	Economic effects		
	Reduction in agriculture	137	35.04
	scarcity of food	123	31.40
	Losses of income	131	33.50
	Total	390	100.00
2	Separation from SNW	F	%
	Dabbo	110	28.87
	Mabara	127	33.33
	Yaa'ii jaarsa	122	32.02
	Coffee ceremony	22	5.77
	Total	380	100
3	loss of identity	F	%
	Change in dressing style	120	31.83
	Weeding style	125	33.16
	Eating style	132	35.01
	Total	377	100

Source: Field Survey, 2014

As illustrated in Table 5, the majority of the households 137 (95.14%) faced reduction in agriculture 131 (90.97%) experienced losses of income and 123 (86.11%) experienced scarcity of food. This poses serious livelihood problems as the majority of the population depend on agriculture as a means of subsistence.

With regard to the social impacts the majority affected households had lost their neighbourhood ties following their displacement and their farmlands. Accordingly, they responded that social networks like Mabara, Yaa'ii Jaarsuma and Dabbo were declined by 33.33%, 32.02%, and 28.87% respectively. The affected farmers in the pre-urban areas of Gimbi town were also lost their identity of dressing, weeding and eating style which was supported by 31.83%, 33.16 % and 35.01% respectively.

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According to the FGD participants, in the past those who ran out of food stuffs or found themselves in financial crisis, or some calamity, could always rely on relatives and neighbors for help, however, we cannot be too sure of that these days people have become individualistic and are carrying their own ways of life.

3.3.2 Environmental impacts

Peri-urban environment in this context refers to the physical environment, encompassing the forest, land, pasture lands and water. In order to satisfy the ever-increasing demand of land, it has become mandatory to expropriate farmlands and displace peri-urban communities from their land holdings. Land as the major factor of crop, livestock, and eucalyptus production, which are the mainstay of peri-urban livelihoods, its

dispossession is one of the contributing factors for the prevailing vulnerable livelihoods in these areas.

3.3.4 Land conversion

Land use is rapidly changing in neighboring areas of Gimbi town. In these neighbourhoods virtually, the entire farm, forest and pasture lands have been on the processes of conversion to settlement, infrastructure and investment.

In between 2009- 2013, Gimbi town expansion has resulted in the total conversion of 52.1 ha of cropland out of which 18.8 ha, 19.7 ha and 14ha of croplands were from Choli, Wara Sayo and the Melka Hola rural neighbouring areas respectively. This accounted for 69.37 % of the total land that was lost between 2009 and 2013 to horizontal expansion of the town (Gimbi Town Administration, 2014).

With regard to forestlands in the rural neighbouring areas out of the total 12.1 ha of forest lands lost 2.8 ha, 4.3 ha and 5ha were from Choli, Wara Sayo and the Melka Hola rural neighbouring areas respectively. However, this does not encompass vegetation of any kind surrounding Gimbi town destroyed by the people whose livelihood is highly dependent upon selling firewood and charcoal.

Personally, the researcher observed the conversion of the prime agricultural lands into urban buildup areas. The depletion of vegetation cover during land conversions has left the neighborhood environments and their top-soils eroded during rainy seasons. This led to loss of aesthetic impression of the physical environment causes of rills in the neighboring areas (See figure 1).



Figure 1: Rills caused by land use change In Melka Hola

Source: Field Survey, 2014

Photos obtained through field observation indicated that rills and gullies were also observed in areas where Construction activities increase impermeable surfaces, which resulted in a reduction of infiltration into ground water and increased runoff and accelerates peak flows.



Figure 2: Gullies caused by land use change in Choli and Wara Sayo

Source: Field Survey, 2014

4. Conclusion

Based up on the findings of the study and the discussion above, it is possible to conclude that it is important to deal with the major impacts of urbanization on neighbourhoods agricultural communities livelihoods. Even if, the urban growth and developments are important determinants for the prosperity of the farm communities through providing infrastructures and market for their products along the town border, these factor alone is not sufficient because there are many other ways in which the town's development adversely impacted its rural neighbourhoods. Among its major impacts include: Gimbi town expansion brought change in various aspects of neighbourhoods agricultural communities. These include physical, economic and social transformation such as extension of infrastructures and shift from agricultural activities to non agricultural activities. These transformations have increased the range use and demands of acquisition lands in the neighbourhoods. This has created shortage of land and affected the livelihoods of the neighbourhood's farm communities depends on agriculture. Urban expansion in the study area resulted to more negative impacts compared to the positive ones.

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