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FACTS
Reports

Community and social responses to land use transformations in the Nairobi rural-urban fringe, Kenya

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Abstract. The process of urbanization is one of the most important dimensions of economic, social and physical changes. It is almost a truism that the planet's future is an urban one and that the largest and fastest growing cities are in developing countries. Approximately 25 percent of Africa's population lived in towns and cities in 1975. By the year 2000, due to rural-urban migration and rapid rates of natural increase, 38 percent of the continent's population lived in urban areas. The proportion is expected to increase to 47 percent by 2015 and to double by 2025, Kenya is not an exception. Rapid urban population growth means an increasing demand for urban land. This land is not available within the city, but in the rural-urban fringe, for various reasons. This is partly due to low land prices, high rents at the core of the cities and legal flexibility in land use planning in the rural-urban fringe. Urban growth is already engulfing the surrounding agricultural lands and small villages. The conversion of agricultural land to residential uses is leading to the rapid transformations in the agricultural production, spatial structure, social structure, land ownership and land market in these areas.

This chapter focuses on the responses/actions of the communities within Nairobi rural-urban fringe and how they manoeuvre through the consequences of changes occasioned by land conversions. It used Town council of Karuri as a case study. The chapter is based on qualitative research approaches presents evidence on how subaltern' actions plays an important role in creating order in an otherwise chaotic situation as a result of 'poorly planned' residential development. The subalterns' actions, as evidenced by their agency, are manifested in community's contribution and participation in provision of infrastructure and services within the Nairobi's rural-urban fringe due to inability of formal provision by planning authorities.

Keywords. Peri-urban, land-use conversion, response, human agency, community.

1 Introduction

The process of urbanization is one of the most important drivers of economic, social and physical change in developing countries such as those in Sub-Saharan Africa (Pieterse 2008; Simon 2007; Hall and Pfeiffer 2000). Rakodi (1997) argues that it is "almost a truism that the planet's future is an urban one and that the largest and fastest growing cities are primarily in developing countries." Approximately 25 percent of continental Africa's population lived in towns and cities in 1975. And that in the year 2000, due to the combined effects of rural-urban migration and rapid rates of natural increase, 38 percent of the continent's population lived in urban areas and the proportion is expected to increase to 47 percent by 2015 , and to double between by 2050 (Thomas 2008; Hall and Pfeifer 2000).

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Aguilar and Ward (2003) indicate that rapid urban population growth has thus led not only to an increasing demand for urban land, particularly for housing, but also for other various urban uses. And that in many countries, the increasing demand for land is affecting peri-urban areas, where urban expansion is already encroaching into the agricultural lands and small villages. Rural-urban fringes are characterized by a diverse land uses, which often vary in relation to their functional linkages to urban and to rural sectors. They are transitional in nature, that is, they become progressively more agrarian in orientation as one recedes from the urban centre to the rural areas. Due to diverse land uses, most population here comprises of heterogeneous groups including original residents, farmers, migrant residents, recreational land users, industrial users, natural resource users, investors and speculators, developers and builders.

Despite the importance of rural-urban fringes, Simon *et al*., (2006), Huchzermeyer and Mbiba (2002) indicate that the area is still understudied. Among the reason given for fewer

studies on rural-urban fringes is partly due to the divisions on academic disciplines that focus on either entirely on areas that have rural or urban aspects. This rural/urban dichotomy does not give room for a proper description that explains the development occurring in the area where the urban and rural areas meet. Also contributing to the fewer studies is the conceptual and operational separation of urban and rural areas in the planning theory and practice. Additionally, the concept of urban sprawl, which seeks to explain the urban expansions in the rural-urban fringe, has also been cited as contributing in obscuring the complexity of cultural, environmental, economic and social forces in work here (Audirac 1999).

Against this lack of focus on the rural-urban fringe (Masuda and Gavin 2006; Mbiba and Huchzermeyer 2002) indicate that the conversion of agricultural land to urban uses is leading to rapid transformations in the rural-urban fringes. Other than fewer studies, the social dynamics at work in these areas has not been easily envisaged until visible physical land conversions actually begin takes place. It is at the rural-urban interface however, being the site for current and future urban growth, that we can better understand the process of today's urbanisation, as well as evolving conflicts over land uses. It is also in the areas where opportunity to manage urban growth pattern before they get imprinted on the landscape exist.

According to (McGregor *et al*., 2006), managing the urban growth in rural-urban fringes is however complex and conflict ridden. It is particularly so in developing nations such as Kenya, where legal and policy framework on land use and ownership is weak. As result land development has occurred in a haphazard manner resulting into the urban sprawl and thus non-optimal use of land within the controlled areas (Mundia and Aniya 2006).

This chapter focuses on the responses/actions of the community (with great emphasis to landholders[1]) within the Nairobi rural-urban fringes and how they manoeuvre through the consequences of changes occasioned by land conversions. It used Town council of Karuri as a case study. The paper based on qualitative research approaches presents empirical evidence of how subaltern[2] actions (Yeboah 2005) plays an important role in creating order in an otherwise chaotic situation as a result of 'poorly planned' residential development. The subalterns' actions, as evidenced by their agency, are manifested in community member's contribution and participation in provision of infrastructure and services within the Nairobi rural-urban fringe due to inability of formal provision by the planning authorities. Furthermore these actions are manifested in the way community members are able to manoeuvre their ways to accommodate changes within their midst.

The chapter to some extent shows that subalterns' actions themselves also are also unintentionally leading to land conversions through the creation of enabling conditions for further agricultural land conversions. Land conversions are also taking place in circumstances where the exercise of agency by farming community to accommodate changes without necessarily selling or converting agricultural land to residential purposes is becoming severely affected by radically evolving new economic, social, cultural, and environmental pressures. These pressures are undermining the local capacities to respond to the changes and thus making some farming community members sell their land without a clear plan on what to do with sale proceeds.

2 Transforming agriculture

Land conversions in the Nairobi rural-urban fringe is eating into agricultural land and thus leading to the reduction in the quantity and quality of land for farming. As already indicated, the case study area was formerly a coffee growing zone, and for economically viable coffee growing, one needs a relatively a large portion of land. Since most of the land has been sub-divided either due to in situ increasing population or immigration leading to land demand for residential purposes, most families have been left with small portions of land for cultivation. Therefore growing such crops as coffee is becoming economically unviable and thus farmers are switching to demand driven farm produce (*see Figure 1*). This shift has come from farmers' own initiatives or from the agricultural officer's advice, as indicated during the focus group discussion where an agricultural officer said that "we are advising farmers to turn to high value crops that require small pieces of land…. To grow coffee economically one need a sizeable piece of land"

It can be argued therefore that, the reduction in farm sizes has not lead to reduction in the value of agriculture production, because farmers are taking advantage of the prevailing situations and are putting their land under high value crops such as tomatoes, kale, cabbages and other fast moving green food. In addition, other than growing high value crops, farmers are also practicing zero grazing of dairy cows and poultry keeping within their parcels of land. This is being enhanced by the availability of the ready market for the dairy and poultry products in their midst and also in the nearby market in Nairobi city. A visit to the study area early in the morning revealed that a number of hotel businesses in the Nairobi city send their pick-up cars to buy fresh milk from the farmers in the area. There is also open hawking of the raw milk by the use bicycles in the area. An informant commenting on change in the farming system indicated that:

> We now have ready market in our surrounding… We no longer need to take our produce to the city. They (newcomers) always come to buy vegetables in our farms…. Also our cows are now profitable to keep. My neighbours take all the milk I produce…. I only have this piece of land you can see! (*Farmer #1*).

As change in farming system is happening the need for large tracts of land for crop production is becoming

[1] I acknowledged the presence of diverse actors but I chose to give landholders more prominence than other actors because the decision to convert land or nor ultimately depend on them. However, because landholder do not live in isolation, where necessary I have made reference to other actors.

[2] A term subaltern is used here to mean persons or agents whose voices are not ignored the dominant mode of production narratives. Yeboah (2005 51) adds that it is possible to locate traces and testimony of subalterns' voices on sites where they inscribe themselves in form of 'unofficial' actions.



Figure 1. Flower farming in green-houses. Source: Thuo 2008.

unnecessary. Coupled with a shortage of labour and with other already mentioned land conversion problems, some farmers do not mind selling portions of their land or building rental residential units on some of the portions of their land. Furthermore, as the Nairobi rural-urban fringe becomes more urban than rural, questions arise as to what is likely to happen to the farming given that agriculture is rarely recognised as a part of urban land use by most Kenya's urban by-laws and other legislations. It is likely to be a challenge and a dilemma for those wishing to continue practising farming as a source of livelihood.

When farming is affected by various factors that are making it an unviable enterprise, farmers have responded in a variety of ways including diversifying crop production, change in crops grown and looking for off-farm jobs. There are however some hardships that are encountered in the transition from the traditional farming to other modes of farming or livelihood. These hardships may include lack of knowledge on new farming methods which are also capital intensive (*see Figure 1*); lack of money to pay for school fees, medication or for other life support needs. It is at this transition period that some farming is severely affected where farmers either fully subdivide their land for sale or sell some portion of land to meet the immediate money needs.

Most of the farmers in the area, especially those growing coffee, were/are saddled with huge personal or input loans from various financial institutions. With the reduced coffee prices in the international market, most of the farmers can/could no longer afford to service the loans, result of which has been the auctioning of some of the farms to offset loan obligations. However, most of these loans are usually less than the value of the land or other infrastructure therein, and once farmers realise they cannot service the loan amounts they either chose to incise sections of their land for sale to pay for loans and/or to cater for the immediate family needs. The phenomenon is made apparent from an observation by one of the informants that:

> I was a coffee farmer. We used to get a lot money… All of a sudden prices became so bad, I was in debts. Then some people approached with an offer to sell a piece of land along the main road…. The offer was irresistible. With the sale, I was able to clear the loan and build some rent units myself… Further, I was able to pay school fees for my children. The income from the rent the tenants pay is more than what I used to get from coffee…. I just laugh at my neighbours who still grow that thing… Others are now 'seeing the light (*Farmer #2*).

The above statement reflects a common thread of narratives from informants of how farmers have taken sale of land as a way of cushioning themselves and their families against the harsh reality of commercially unviable farming. The practice is being reproduced in most of the areas, with the first group to incise their land for sale to residential developers becoming an envy of those still holding their land on agriculture. This has created a condition of 'impermanence' for those still practice farming, while other have left their land idle or under cultivation of squatter farmers.

The pressure for land conversion is at times so much that some land buyers have been exerting much pressure on farmers to sell their land to them. Unorthodox means such as tricking farmers have been reported though not as predominant as the system of willing-seller-willing buyer. Most of the people as already noted own/hold land parcels which are less than one acre, which are even not sufficient for traditional farming. Since not all farmers are able to adopt[3] new farming techniques and modes, and with problems being experienced n these urbanising areas, the kind of farming taking place in their land is hardly enough for subsistence production. Because most of these people are usually approached by the land buyers when they least expects to sell the land, the money from the sale of the first portion (in case they do not sell the whole parcel) is usually spent in an unplanned manner, and consequently ends up being used for consumptive rather than enhancing the productive purposes. An informant commenting on land sale indicated that:

> These people are approached by people with a lot of money…. You remember I told you that we have many people working abroad and other good places? These people! Don't joke with them. Money is not a problem…. They just flash the cash and farmers cannot avoid the temptation. The next thing they realize they are in Chief's office signing the transfer documents.... After that [selling their land] everyone is on their tail to benefit from the sales proceeds. Others get an additional woman…. Within a short time money is finished and they are now beggars with no homes, families and women…. You see how bad it is? It is a serious issue here (*Community Leader #1*).

Once the first portion's sale money is finished farmers keep on incising additional parcels for sale until a point is reached

[3] Inability of some landholders to cope and adopt to changes in their surrounding by adopting innovative way of farming against dwindling land sizes in a semi-rural set-up such as Nairobi fringe put to question observation by Boserup (1965) and Mortimore (1975; 1993) that smallholder farmers are able to respond to pressures by use of various forms of innovation.

where they sell the whole portion of their land. This sale of land is uncoordinated among farmers and thus there in no uniformity in the pattern of residential development which is leading to some areas being fully covered by residential houses while the abutting farms are still practicing farming. This, as already noted, comes with effects which are making continuation of farming activities in some areas to be constrained. Therefore, this aspect of some farmers resigning to land sale fate is affecting neighbouring farmers who would otherwise not have chosen to sell their land but to continue with the farming if the situation was different.

3 Reshaping work and income

With declining agricultural opportunities due to consequences of land conversions and population increase, most families formerly relying on farm for food and income are turning to looking for non-farm jobs within their locality or elsewhere. I should mention here that it is hard to assign to a particular actor a specific single role in regard to land use, this is true of farmers. Most of them are either doing some business such as small-scale retail shops or are employed by the government or private sector. Also a good number of farmers are also working in the Nairobi city and elsewhere either in formal or informal sectors. The adoption of multiple sources of income is meant to complement the dwindling earnings from the farming. In most of the homesteads, it is likely to find at least one member working in a non-farm job. Another source of income for some people is rental houses within the farms. An informant supports these observations by indicating that:

> You cannot point at any one person who is purely in agriculture…. People are either working in the Nairobi city or doing casual work such as construction in their villages or selling some products in their kiosks…. The point I am making here is that people are doing a lot of things to survive. Even those who claim to be farmers are just lying. Most of their income is coming from some rental houses on their land…. They just do farming to keep themselves busy (*Agricultural officer -During focus group discussion*).

The participation in multi-spatial jobs is jeopardising agricultural activities such as coffee farming or dairy farming which require intensive labour and the extended farmer's presence for the optimum productivity. As most people become rooted in non-farm jobs which are well paying, and given the constraints experienced by farming, their continued involvement in agriculture as a source of income is not guaranteed. Farming thus is becoming secondary to other sources of income and it is usually practised as a back-up to cater for kitchen vegetables needs or, as a past time activity especially during the weekends or evenings when family members are not engaged in work elsewhere. This echoes Tacoli observation that:

> …rural non-farm employment and agricultural activities among [peri]-urban residents are an increasingly important element of livelihood strategies. Multi-activity at the household or individual level helps decrease vulnerability to shocks and stresses and stabilise incomes which may otherwise vary widely on a seasonal basis (Tacoli 2002 i-ii).

Increase in residential land uses and particularly with city population moving into the area is bringing some opportunities into the erstwhile rural population. People moving to the area are creating business opportunities for the indigenous residents and other groups such as former farm labourers in that they present needs that must be met daily. These needs include services, food and other home-related requirements. Along the major roads and even access roads, there are roadside kiosks[4] and grocery shops selling food stuffs. This is supported by the comments from one of the community members who indicated that:

> With increased population one need to be wise…. These people need food and other basic necessities. That why we have decided to start these businesses…. They [businesses] are small but we get our daily bread from them (*Farmer #3*).

The aspects of having available outlets from which people can buy food and other basic necessities in the formerly rural areas is making these areas more suitable for urban oriented settlement than before. There are designated market centres where people are to buy the food stuff and get other services. These centres are not many and are usually separated by distance, and thus one had to spend time either walking or use other travel means to reach there. The convenience afforded by the decentralised shopping locations, coupled with availability of cheaper house for rent in the Nairobi rural-urban fringe, is making these areas attractive to the city dweller and thus increases demand for land for construction of rental residential housing units.

Urban residential land uses are introducing urban-related lifestyles such as people planting trees and flowers in their home gardens. In several places I visited, people have established trees and flower nurseries on the river valleys especially along the major roads. These trees and flowers nurseries are targeting the local market for the large number of new residential home builders and settlers. The majority of the people establishing flowers and trees nurseries are landless and are using the public riparian land reserves especially near road bridges for their activities. However, even landholders with parcels of land along the road but abutting rivers, are also engaging in this practice of growing flowers and tree seedlings for sale. An observation given credence by a comment from an informant that:

> My land is small, but I am luck I am close to the stream though its water seems not clean and it is almost drying up, I can grow some tree and crop seedling for sale to other people…. I also grow flowers for sale to those people [newcomers] because I know they want to beautify their homes (*Farmer #4*).

As noted elsewhere, the flower gardens in residential homes are becoming a source of conflicts between

[4] Kiosk is a small scale retailing unit usually operating in semi-permanent building structures.

the farming residents and the non-farming residents. This is moreso to those who are rearing free range chickens, goats and sheep, which are destroying flower gardens and orchards in the newcomers' homes while rummaging for food. These conflicts have led some residents to spray their flowers and tree seedlings with pesticides with intentions of 'teaching' farmers a lesson; livestock which eat the flowers and trees sprayed with chemicals after will die or become ill. This is making free range poultry, goats and sheep keeping hard to maintain while caging them requires additional resources to feed them, therefore making such an enterprise expensive for farmers in the long run.

With agriculture being negatively affected by both local and non-local factors, it is becoming imperative for those who had all along relied on farming to rethink on new ways of meeting their livelihood. Most people have tried to change their mode of farming by practicing intensive cultivation of demand value crops (such as tomatoes, kale etc), a practice which I think cannot be a permanent measure given the attendant water pollution problems in the areas which are fully urbanised. Notwithstanding the temporality of adopted measures, the study area has an advantage of being in close proximity to the Nairobi city. The proximity comes with it availability of job opportunities to the indigenous residents, who are being edged out from their farming activities by land conversion and the problems associated with it. In addition to the availability of job opportunities in the Nairobi city, the residents also have easy access to information, than their rural hinterland counterparts, on the availability of job opportunities elsewhere in the country and abroad. In fact there were some remarks on some of the apartments being constructed through the money remitted by people who are working abroad. The changing labour and income situation was made clear from an observation that:

> Those who cannot get jobs here go to Nairobi city…. Others go to other towns. You see this area is near Nairobi, so people get to know much… Other people are [working] abroad. You understand? Because Nairobi city is here with us….people are no longer looking after their parents' shambas, they are thinking ahead. What do they have to inherit? Just space for a grave? Tell me? …They have no option other than going and go! (*Community leader #2*).

Availability of non-farm jobs within and outside the Nairobi fringe for the indigenous residents is creating a serious labour shortage especially the non-paid farm labour. This with other related factors, as already noted, is increasing farming overheads and thus making farming an unviable commercial enterprise, the result of which has been leaving the land fallow, subdividing land for sale or using land for construction of residential units for rent.

4 Creating new forms of cultural interaction

The family and kinship networks provide the basic support network for most rural communities. They are also responsible for socialising children, caring for the dependent and provide other kinds of support to the members of the concerned community. As the newcomers join the indigenous farmers and residents, several consequences emerges, as already identified, among them is the breakdown of communal, kinship and familial ties. The intrusion by the newcomers not tied to local customs and norms, has weakened the cohesion among the members of the formerly rural communities. As result, people are losing the ways through which rallying people together for a particular communal cause had always been achieved. This is even more challenging to the elderly members of the indigenous groups given that they are unlikely to move to the Nairobi city or to other areas to look for employment like the young men and women. Breakdown of family ties and loss of communal cohesion has affected the initiation and management of community projects, caring for the dependants such as orphans and elderly and, also increase in crimes and other social vices.

However, as traditional institutions are breaking down, 'new modes' of interactions are emerging among the residents. This has proved to be important in promoting collective action by the various community groups and also in providing necessary support to various members of the community. As one of the indigenous resident did put that:

> We no longer have clan gatherings. Most people are now living on their own … If we don't have a church I don't know to we whom could be turning to…. There (church) I have friends and we also have a neighbourhood group for our church member…. Church is all that I have in this village (*Resident #1*).

Churches have become a new space of communal get-together where members meet to support each other in the times of need such as during bereavements, weddings or sickness. These are the roles that *Mbari* (family group or sub-clan) members primarily perform, though still being practised by some of the family/clan members in the area who have continued to stick to their *mbari*.

There are different churches in the areas and family members can join any, especially for the adults irrespective of clan or family group. In these churches they have organised themselves into various groups targeting women, youth, children and men. These groups more or less mirror the customary groups among clan members with the major difference being their origin. Customary groups are based on kinships ties, and thus involuntary, while the church groups are based on membership and faith. However, the current set ups of the church groups mirrors most of the customary organisational attributes and functions. Most of these groups meet on Sundays after the church service, either within the church compound or in members' homes.

Other than the religious linked groups, there also exist non-faith groups such as *Kiama* (Plural, *Ciama*) for the women (although there are also men in some of these groups). *Kiama* play such roles as merry-go round where members meet once a week either on Sunday or on a designated day of the week. Here they contribute some money which is given to one member (usually through ballot system) every week on rotational basis or is used to buy household items for each member each week. Members in these groups also try to assist each other in times of need such as in bereavement, sickness

or any other needs identified as meeting criteria for other members to support. Like in the church groups, the membership of these groups is not restricted to kinship ties. However, personal relations plays a vital role on how the members come together to start a group. These groups usually meet in members' homes on rotational basis and this is meant to bind families of the group members together.

There are also other groups which are mostly comprised of men or youths. These groups are like the *Kiama* in their origin and membership recruitment, with only exceptions that members meet in the public places such as pubs and their major purpose is investment. These investments include buying of plots of land and/or construction of rental residential houses, investment in shares at the Nairobi Stock Exchange or any other investment members can agree on. Other than investments, members also support each other in times of need through by making contributions or other assistance. These groups are open to a more diverse membership than *Ciama* which are mostly based on personal relations. These groups are in some cases registered and thus assuming legal entity statuses. Both the newcomers and indigenous residents are in some cases members of these groups. The groups provide avenue for the different people within the residential areas to know each other, as one of the newcomers to area commented that:

> Here we don't know each other…In fact I knew my immediate neighbour in Kigwaru [a local pub] while we were having Peter's (Pseudonym) goat eating party[5]…. I didn't know that he is my immediate neighbour… At least now we know each other (*Farmer #5*).

These groups are providing new spaces for people (both the newcomers and indigenous) to interact, although the level of representation (for newcomers and indigenous) varies from one group to the other depending on the level of interpenetration among the people. As these new spaces of interaction continue to play significant role in the area, the customary institutions are losing their ground. These customary institutions are necessary in safeguarding family and communal land and its resources and moreso in such areas as in the Nairobi rural-urban fringe, where land is tied to some aspects of family ownership. With continued disintegration of communal and customary values more and more people are losing values attached to the family land and are now regarding it as a commodity that can be put on sale. This can partly explain why there are widespread land conversions but also at the same time the existence of land still under farming. An indication of varied individual values is manifested by the presence of people who are still farming against the identified constraints or are still culturally attached to land as a resource to be bequeathed to the next kins and not meant for sale whatsoever. The question is, however, whether farming activities will hold for long as residential land use dominates while bringing with it some consequences not so favourable for continued economically viable agricultural activities.

In trying to inculcate moral and societal values of community to the young men and women, the community especially the indigenous farmers and residents have come up with 'new rites' of passage. A major comment of the issue of new rites of passage comes from an informant who observed that:

> With declining communal and culturally bound families, community's values are hard hit when it comes to how they are transmitted from on age group to the next…. What we are doing is to organize for such occasions with parents in collaboration with the churches to send boys and girls, once they reach the age, to undergo circumcision [circumcision in the study area is currently for boys only but girls are also made to attend teachings alongside boys but are not 'cut'] to secluded places for rites and teachings…. The ceremonies are conducted while boys and girls are taught on how to live a responsible adult life and how to approach life in such a diverse cultural environment (*Farmer #6*).

In the new rites of passage the elderly members of the community, who are knowledgeable on community affairs and traditions, are tasked to teach the young men and women of various aspects of living as adults. The activities involved usually takes two weeks to conclude. Given that these activities are organised by a combined efforts of various churches, also shows the increased significance the church is playing in the area especially in filling the gap that is being left after the loss of communal ties and traditions. During the field work (on which materials/interviews presented where collected) I witnessed such an alternative rite of passage occasion when it was coming to a close. I was made to understand that the majority of the participants in that particular rite of passage ceremony were those born of indigenous farmers and residents. And, since it was during the school holiday time, the newcomers' children of the initiation age had gone to their parents' place of origin to undergo such ceremonies alongside their kinsmen and women.

The alternative rites of passage are good for the young men and women to be taught on how to live well especially in the diverse cultural environment the Nairobi rural-urban fringe is becoming. But I seriously questioned the efficacy of the alternative rites of passage given that life values are learned through a socialisation process which is embedded in day to day life-long encounters and cannot be condensed into two weeks training programme. Also, its impact is not evident as in most of the villages one can hardly come across a young man or woman at home during the day-time as majority of them are working away from homes. Also, from informed sources it was indicated that majority of the crimes in the area are committed by the children of the indigenous residents in connivance with the newcomers. I think the rites of passage initiatives are just making the young people aware of the new circumstances that their areas are getting into and thus preparing them to participate in it, further undermining their attachment to land for farming.

[5]Goat-eating parties are usually organized with major purpose of raising funds. People meet usually in a public place such as a pub where advance preparation had been made for goat(s) to be slaughtered and roasted. They feast together and then make contributions in for of hard cash or pledges to the issue at hand. In this case, goat eating party was meant to raise money for Peter's wedding which was a month away.

5 Emerging forms of community influence

The Nairobi rural-urban fringe experience limited presence of governmental institution. This presence is in terms of the adequacy of the governmental institutions given the rates of population increases within these areas. Some of such institutions are Judiciary and the Police Departments. In face of the deficit there has been an evolution of neo-customary modes of dispute resolution or the alternative dispute resolution mechanisms. These mechanisms though referred to as informal have played a key role in the maintenance of order in these areas. Even land ownership/transfers have used the same so called informal land markets transact their businesses. As one of the informants did put it that:

> These areas have not benefited with improved service and infrastructure…. No new police stations. No new government officers…. In such a situation we have elders whom I work with in various villages. …In case of petty issues I encourage them to resolve them. …Some of these cases involve domestic quarrels, issues to do with land boundaries and waste disposal. …If one does agree with the decision of the elders then the cases are forwarded to me. In most cases most people go with the decision of the elders (*Community leader #2*).

The alternative mechanisms are being promoted by various governmental and non-governmental entities in these areas, given that the government is not capable of providing most of the services needed, partly due to their informal statuses of these settlements from the beginning. Land related issues form the larger part of the most emerging conflicts and include quarrels over the plot boundaries, non-payment of instalments by the newcomers, multiple sales of the same plot or earlier transactions being challenged by other family members, among others. Since from the inception such land deals are usually informal, it has been unofficially acceptable to let the same mechanism deal with the issues arising from such transaction. However, as have been noted in elsewhere (Thuo and Waswa 2006), informal conflict management initiatives have been found to be discriminatory in conflict resolution especially where some members of the society such as women and other marginalised groups are involved.

The other areas where community-based initiatives are thriving include water supply provision and maintenance of access roads and bridges. One of the informants put it that:

> When it comes to construction of access roads, the council will do its best. However, due to our budgetary constraints, we are unable to meet all the expectations of the people. In this regard through self initiative, people have come together to construct road and bridges within their areas… They are doing other things like lying the water pipes from places where boreholes are located to their houses on a communal basis...This way people have complemented our activities without which I don't know how it would have been (*Local Government official #1*).

The aspect of community taking control of their infrastructure needs has ensured that the areas which would have hitherto descended into chaos in terms of lack of service and infrastructure provisions, has some semblance of order. Reinforcement has been added to the operation of these community initiatives through developing links with the government and Town Council of Karuri, especially with the introduction of Constituency Development Fund. These initiatives have been further amplified by the existence of local and foreign donor support especially in water provision. These initiatives are making services and infrastructure reach far interior area and therefore making new areas accessible for residential settlement thus leading to more land conversions to take place.



Figure 2. Donor supported community-based water projects. Source: Thuo 2008.

The informal mechanisms for service delivery in the Nairobi rural-urban fringe are putting decision-making capacity into the community's domain, and therefore further minimising the role of government or its agents. This somehow has reduced the legitimacy of government for controlling land developments in different areas because it is not involved in the initiation of such development activities. And, with entrance of the foreign donor (*see Figure 2*) and civil societies' activists, implementation of the government regulations and development controls becomes more and more constrained. However, although the community based initiatives are noble, it is my view that their continued effectiveness is likely to be affected especially as the population densities of the Nairobi rural-urban fringe increases and with the emergence of new group of urban-oriented people who do not subscribe to the existing social and communal norms.

From the foregoing discussion, one of the issues that come to the fore is that land conversion from predominant agricultural to residential uses is occurring without/ with least involvement of the Planning Authorities. Therefore, there is no corresponding investment in social and physical infrastructure and services by the government or Town Council of Karuri. This is mostly manifested in relation to personal and property security. Crime as already is occasioned by various factors, among them lack of adequate police, scattered residential development amidst farming activities making it easy for criminals to hide, loss of livelihood sources for some of the indigenous residents, reduced adequacy of communal controls and increase in the number of people in the area with unknown histories, among others.

People have not been passive to the crimes and the resultant effects; they have taken initiatives to address/reduce the problem. These initiatives are both at community and individual levels. At individual level, some people have engaged private security companies who are providing guards to their home during the day and at night. Other have independently hired person who have no attached to security companies (locally referred to as watchmen) to guard their homes and properties.

At a community level, residents, especially those in more clustered residential dwellings, have come together and have employed security guards either from the companies or just engaging individuals to work as a guard for their residences. In this case, they have agreed on the amount of money to be contributed by each home (and not household, as one home may different forms of household's arrangements) towards the payments of the guard/s. From the interviews, an informant said that "we contribute 500 Kenya Shillings[6] (equivalent to slightly more than 7 US Dollars) every month to pay to security people... You can't gamble with your life" (*Resident #2*). Majority of the residence engaging security companies or individuals to guard their properties are mostly the newcomers, with little or no involvement of the indigenous farmers and residents amidst them.

In other cases, especially the areas where the majority of the people are the indigenous farmers and residents, they have organised a security roster whereby each family (emphasis here is on family and not home, a family which may consist of father/mother, children and grandchildren staying in homestead consisting of many homes), contribute one male adult on agreed days to serve in the vigilante groups. This is done at a village level and vigilante groups operate during the night. These groups are recognised and encouraged by the government in the name of community policing. However, in the not distant past the government used to be against their formation due to their arbitrary and extra-judicial ways of operation (*Community leader #1*). With the increase in cases of crimes, and with the government inability to provide enough security, the vigilante groups have been allowed to operate in collaboration with the police and the provincial administration. The homesteads with no male adult are required to make monetary contributions to the various 'security committees' operating in different villages. These amounts are used to buy batteries for the torches and in some cases to feed those who are actually doing the vigilance duties at night.

The existence of individual and communal efforts towards ensuring security in the Nairobi fringe has scaled down the crimes, with cases of crimes reported declining (*Community leader #2*). This to some extent has removed the tag 'insecurity' which had for so long accompanied any reference to the Nairobi rural-urban fringe. The implications of these initiatives and reduction in crime instances may be partly contributing to the increased demand for residential housing in the area as the newcomers are assured of the security albeit with their personal financial contributions towards it, and potentially resulting to more agricultural land being converted.

[6]In October 2009 1 US Dollar was equivalent to 75 Kenya Shillings.

Tied to the issues of social and physical infrastructure and services, is the decline/lack of corresponding public investment to reflect the rising number of people in the area. As a result, there has been an increase in private sector alternatives, whose costs are usually higher than the public sector provisions, and in the absence of clear regulation their quality of services is always in doubt. However, their services are widely accessible to most of the residents. This is highlighted by the commentaries of one of the informants who put it that:

> Population is increasing, government have not built any new hospital, no new structures in the existing health centres…. People either go to town or seek medical services from local private clinics. It is a terrible situation…. Even when you go to the government health centres, there are no medicines, queues are long and you waste a lot time (*Community leader #2*).

A journey through most of these areas confirms the above comments. There are private schools and, private clinics dealing with either herbal medicines or modern medicines, among other services. These services by private sector are complementing the existing government facilities which are inadequate to cater for the increasing population. Also, the existing government facilities were design to serve rural-oriented populations, especially schools, and thus are inadequate to cater for the urban oriented newcomers, who have either continued to educate their children in city schools or are now enrolling their children in private schools which have somehow closer quality attributes to the city schools. An informant indicated that:

> Public schools perform poorly after 'this thing' called free primary education (compulsory free primary education was introduced in the year 2004 by the Kenyan Government)…. Classes are overflowing no additional teacher, no new classes… It is a total mess. I am a teacher in a public school but my children cannot go to a public school…. I take them to a private school, though not so good but I think they are better off there (*Resident #1*).

The other sector where there has been an increase in private sector service provision is waste management. Town Council of Karuri does not have the adequate capacity to handle waste generated by the increased residential settlements. Moreso it does not have a strategic plan on the waste management. This gap has somehow been filled by independent small-scale service providers who operate without any control from the central government or Town Council of Karuri. They collect wastes from the households who are willing to have their waste collected (some are unwilling to pay and just dump their household waste in open spaces at night) at a fee. The waste collection is done once per week and every household is issued with a polythene sack every week, when payment is also made. An informant explaining how their waste is managed commented that:

> We get our income from waste! You see the council is not able to collect all the waste…. We collect 200 Kenya shillings every month from each household

> so that we can collect waste for them…. We only need to pay only 100 Kenya shillings to a farmer in Gachie to allow us dump the waste in his farm…. We hope the council will not take the work [waste collection] away from us (*Resident #3*).

Most of those dealing with waste collection belong to the indigenous group and in most cases they are the people who have other livelihood occupations such as farming. However, some of the waste collection service providers are well organised businesses with trucks to collect the waste and they have also employed some people to do the actual waste collection. However, the majority of the waste collectors are using the hand or donkey drawn carts to ferry the collected wastes to the dumping areas. An unfortunate aspect of this waste management system is that some of the collectors dump the collected waste on the roadsides in some of the isolate areas or along the river valleys. There are cases where they have paid some farmers to allow them dump the waste on their lands. I was able to witness one of these private waste dumping sites. This mode of waste disposal as already identified is threatening continued farming in the concerned farms and the surrounding areas.

There is also an issue of management of septic tanks and pit latrines, where the small-scale service providers do the emptying of the filled up facilities. Those who are more organised have truck with sucking machines and do the emptying of the liquid waste into city councils sewerage connection within the city at a fee. However, majority of the service providers use bucket to empty the liquid waste and then they cart away the waste in drums to the open grounds or into the river channels (*see Figure 3*). This is affecting the quality of water for either drinking or farming.



Figure 3. Showing solid waste disposal on the roadsides along Gachie-Ndenderu road. Source: Thuo 2008.

6 Conclusion

The chapter demonstrates that land conversion is part of complex mix of social, environmental, cultural and economic feedb ack loops. Land conversion which drives and/or is driven by a whole series of economic, cultural and social change and elements such as shift from collective kin-based behaviour to more individualistic behaviour, is nevertheless also shaped by adjustments which are rooted in customary ways.

Changing social, cultural, environmental and economic circumstances as a result of land conversions and market forces has dramatically affected local areas of the Nairobi rural-urban fringe. People are however not passively accepting their fate of being victims of these changes but instead they have evolved a variety of local/human-level responses to enable them live in the area. Their actions however have created enabling conditions for further land conversions either through making the hitherto unfavourable areas for settlement becoming favourable for residential settlement or creating more obstacles for continued agricultural activities.

It is through landholders' actions that illustrates how agency is exercised within existing structures (formal and informal–representing modern and traditional respectively) to address the changing circumstances that internal and external conditions are creating in their areas. The agency is operating within these existing structures to come up with strategies to enable people to live in the changing environment and circumstances. These strategies are hybrids of both traditional and modern livelihood strategies. According to Simon (1997) and Nabudere (1997), such hybrids strategies are not postcolonial but are rather post-traditional because they embodies

> ... indigenous values, social structures and identities that survived –admittedly to differing extents and with differing degree of engagement with or transformation by colonial impositions (Simon 1997).

The hybrid formations are to some extent informed by class status of agency (Yeboah 2005) and as such differs in distribution and practice within the Nairobi rural-urban fringe. For example, people manifest different interrelated pattern when addressing the issue of insecurity where the indigenous residents use the vigilante groups while the newcomers engage the services of security guards.

Human agency should not however be over-romanticized. There are situations where new pressures are stronger than the capacity of the local/individual agency to cope with or adapt to the changes. In such cases, landholders are selling their parcels of land without apparent plan on 'what to do next.' In such instances the affected landholders and in most cases their families have become destitute and proletarians within their localities. In addition, while the adaptations which result from the exercise of agency are testimonies to the initiative and determination of the people involved, it is important to recognise that such strategies may be associated with heavy costs and, are thus uncertain coping strategies leaving the actors' lives insecure and exhausted.

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