

# **Housing Themselves in Informal Settlements: A Challenge to Community Growth Processes, Land Vulnerability and Poverty Reduction in Tanzania**

**Wakuru MAGIGI and B. B. K. MAJANI, Tanzania**

**Key words:** Housing Themselves, Informal Settlements, Housing Development, Land Vulnerability and Poverty Reduction

## **SUMMARY**

Poverty, land vulnerability and Community growth are human dimensions in global environmental challenges facing sustainable development, which currently gains its discussions in world's agenda (Millennium goal, 2000; Quito declaration, 2003). Extent of knowledge in which different actors involved to address the aforementioned challenges, informed about processes in and on decision making, and policy guidelines on land development and management in informal settlements in rapidly urbanizing cities and community copying strategies in sustainable housing development seems limited (Habitat, 2003). This paper therefore focuses on understanding this limited knowledge thus to contribute to the improvement of poverty reduction policies formulation and sustainable community development in Mwanza city case. Equally important, the study provides data that can be used to improve understanding of human vulnerability to environmental change and to target appropriate efforts to assist poor peoples in the context of sustainable development. Qualitative and quantitative tools using interviews, observations, archival records, documentation, mapping, stakeholders' workshop were employed and supplemented by focus group discussions. Land degradation, haphazard housing development, poor sanitation, poor access to infrastructure utility, facility and financial institutions for loan, resource depletion, fear of eviction due to land insecurity and therefore increased shocks (vulnerability) are some challenges. The result shows that poor institutional coordination and policy enforcement in land development and management and socio-economic activities beyond planning needs affect climatic changes including seasonal variation of rainfall, affects the ecological system of the city and reducing level of city productivity. However, social capital and networking and adopting land regularization noted important in reducing housing risks and other vulnerability indicators.

# Housing Themselves in Informal Settlements: A Challenge to Community Growth Processes, Land Vulnerability and Poverty Reduction in Tanzania

Wakuru MAGIGI and B. B. K. MAJANI, Tanzania

## 1. INTRODUCTION AND BACKGROUND

Housing is a key determinant of quality of life that can be measured at individual, household, and community levels (Campbell, Converse, & Rodgers, 1976) and human rights in the cycle of human life. It is unique among consumer goods in its pervasive economic, social, and psychological significance (Smizik & Stone, 1988; Stone, 1991). The physical and social environments, within the house and the neighborhood, support family functioning and children's personal growth (Bartlett, 1997; Kaufman, 1996; Sprague, 1991; Stone, 1993). Developing countries government, adequate and decent housing provisioning has become the central focus and an integral component in National Strategies for Growth and Poverty Reduction towards ensuring landholders land are secured and mortgaged. However, housing themselves defines as efforts of individuals to construct their own house from their personal savings as alternative to obtain better housing in informal settlements. It is also characterized by personal savings, which take over a long period of time led to house construction process to take very slowly over a period of time. Informal settlements discussed widely (Mabunguje, 1992; Nurul, 1997; Bertrand, 1999; Kombe, 1995). In this context refers to settlement that inhabitants do not enjoy rights to an adequate standard of living and lacks approved plans *and land rights to ownership and use* (title deeds) from the recognised authorities *as potential* requirement to access loan from conventional housing financing institution. Housing development includes manifold activities, rules, regulations, agreements, policies, which made to produce, construct and organize these physical objects and surrounding environments. Land vulnerability discussed widely (Chamber, 1989; Obrist 2004). In this context meant set of factors associated with an individual or group that increases their probability of experiencing a reduction in well being and associated infectious agents including policy interventions to foster community growth processes.

Developing countries governments has been faced with increasing informal housing development in her cities. The increase observed resulted from increasing population with limited serviced and planned land for housing development. However, poor policy enforcement, outdated laws, inadequate capacity of local authorities to provide planned and serviced land widely discussed as among influencing factors (Christian, 1995; Kombe, 1995; Kreibich et al, 2002; Topfer, 2002). World Bank (1986) observes access to housing is a basic human right that should be available to all individuals. However, nowhere would this be far from reality than in most cities of the developing world where housing about 70 percent of city residents is commonly in informal settlements. In recent past, practically local authorities in developing countries seems to agree that the vast majority of shelter and housing for the middle and low-income groups is and will continue to be provided through the individual effort of people to develop their own houses (Kamau, 2002). Social capital and networking

through community participation and mutual understanding pronounced to be important for exploring housing provisioning for city development and conflict resolution (Pascal, 2002; Pretty *et al*, 2001). These provide the theoretical underlying this study.

In support to the above, Kulaba(1981) argues that for the case of Tanzania that “ *the role of the popular or informal housing sector, where the majority of the low income families live and where there is a high rate of owner-occupier housing by low income families, will continue to expand*”. Kamau, 2002) notes the same by arguing that, a huge shortfall in housing provision means that the role of the individual housing development will continue to rise in developing countries cities. Therefore owner-occupier housing ought to be given high priority in policymaking and decision.

Based on financial access interventions for housing construction in urban areas, seems a consensus that a large segment of urban population in developing cities does not have access to conventional finance for housing. Sivan (2002) argues that most of the individual housing developers have no access to conventional system of housing finance. Much of their resources are generated from family savings and sale of assets as well as loans from friends and relatives. Aggarwal (1996) quoted by Sivan (2002) about 35% of the total employment in Delhi is in informal sector, these people are deprived of institutional loan facilities for housing as commercial banks do not provide loan without security. Kim (1997) argues that because of lack of stable long term sources of funds and the narrow base of the financial institutions engaged in housing finance. Rakodi, 1997 and Obudho, 1997 observe that most appropriate means to achieve raise-housing ownership among the population in developing countries is by encouraging the coordinated individual housing development. At present the private sector seems has a major influence on how cities in third world countries will develop and therefore proper formal and informal housing construction need to be monitored.

Given the rate of urbanization in developed countries seems is slower compared to developing countries, where everyday it is approximated 150,000 people are added to the urban population daily in developing counties (Makongoro, 1998). Tanzania among other developing countries, with growth rate of 3% and with urbanisation rate of 9% per annum shows rapid growth rate, which is the highest in Africa (Makongoro, 1998). It is expected that in 20 years to come, one in two Tanzanians is expected to be living in urban areas. In contrast to the population growth increase in urban areas, deficiency in housing supply remains a critical problem to cater for this rapid urban expansion (Lupala, 2002). The gap between the supply and demand for housing has been widening with time. This can be traced back from the slum clearance, site and services and squatter upgrading in Tanzania since independence in 1961.

After independence in 1961, Tanzania has been in effort to improve housing provision and improvement including slum clearance, sites and services program. For example, the First Five Year Development Plan (1964-1969) the demand estimated for housing to cater for the urban population was 517,619 units, while the housing stock was 217,575 units or 42% of the

housing requirement during slum clearance programme in late 1960's. This statistics show that there was a shortfall of 300,104.

The site and services scheme of the 1970s was an improvement of the public housing programmes. It had several inherent advantages in that available funds could be stretched to benefit many more people and the beneficiaries could incrementally improve their housing as they maintained the agreed upon designs. The major disadvantage with the programme was the assumption that there was an abundant supply of land and that there was enough goodwill on the part of the national and local government to improve the badly needed house proliferation in informal settlements and technical advice.

By the mid 1970s, governments were getting concerned about the inner city slums and the deteriorating physical living conditions in many of informal settlements in Tanzania. Many governments therefore condoned or allowed the unabated evictions of poor slum people to areas outside the main business districts to the outlying districts. Coupled with this was the unprecedented immigration into cities in search of the ever-elusive employment and high living standards by rural migrants. Many of the new migrants found refuge in these peri-urban districts or squatter settlements where housing was cheap albeit with little or no access to basic services such as water and sanitation.

The slum and squatter upgrading programs of the late 1970s and early 1980s implemented after slums clearance program. One major important aspect; the fact that governments had recognised the need to improve the shelter, basic services delivery requirements of slum and squatter settlements and the importance of security of tenure as opposed to evictions. Despite these progressive thoughts in these programmes they suffered from the project-oriented approach of the earlier programmes. For example there were no inbuilt mechanisms for follow up on maintenance of the investments resulting to huge losses; the programme also suffered from lack of ownership by the beneficiaries as little time had been committed to community mobilisation and organisation.

By 1996 the estimated cumulative annual demand was about 800,000 housing units while the supply of housing was below 20% (URT, 1996 in Kyessi, 2002:78) also it was estimated that by the year 2000 there will be about 10 million urban dwellers requiring 2.4 million dwelling units out which 1.8 million are new demands (URT, 1996). Currently the estimated shortfall for housing is 2,000,000 units majority of them who are much affected are the low-income people. Owning shelter is usually a goal that every household in the rapidly urbanising cities like Dar es Salaam wishes to achieve, but the big challenge is poverty increase, land vulnerability for the poor and rapid community growth process in terms of need for decent housing in informal land areas

However, the provision was left the government concerned, which later frustrated by their efforts especially those addressing public housing. There are many reasons behind this frustration but key among them include the inability of the government to cope with the growing housing needs of the urban immigrants and the rather rigid requirements set up by

housing finance institutions especially when it came to collaterals or security. The result of this was that majority of the low income urban residents were displaced or squeezed out by the middle and high-income residents.

The major shift occurred in the 1980s with the popularisation of the enabling approach articulated by the United Nations Global Shelter Strategy to the Year 2000. The approach put more emphasis on the mobilisation of the full potential and resources of all actors in shelter development and improvement process. The major departure of this approach from the previous ones was the identification of the government as an enabler or facilitator. This approach also recognised the constraints realised from the previous efforts such as lack of secure tenure, inflexible housing finance systems, inappropriate planning and building standards and inability of legal institutions to involve people. This approach was taken further by the Habitat II conference by emphasizing partnerships and participatory approaches to achieve adequate shelter for all. In responses to this conference conclusion, Tanzania formulated Homeownership policy as a strategy to enable residents' access to adequate housing.

## **2. METHODOLOGY**

### **2.1 Characteristics of the Study Area**

Mwanza city (as second largest city) in Tanzania after Dar es Salaam particularly Ibungilo was taken as case study area. It had more than 500,000 population (URT, 2002). The settlements observed having more than 65% informal settlement with its residents (landholders and tenants) insecure. Among the 35% planned and serviced land, only 70% of the total landholders observed have security of tenure (title deed), which can mortgage for financial benefits. Lack of security of tenure enhances increased income poverty to informal dwellers in informal settlement. And increased land vulnerability. On the other, the study observed among the 45% of the total respondents, only 30% have used their title deeds for accessing funds from financial institutions. This put one to wonder is only title deed important in informal settlements or there are other factors important for enhancing community growth processes.

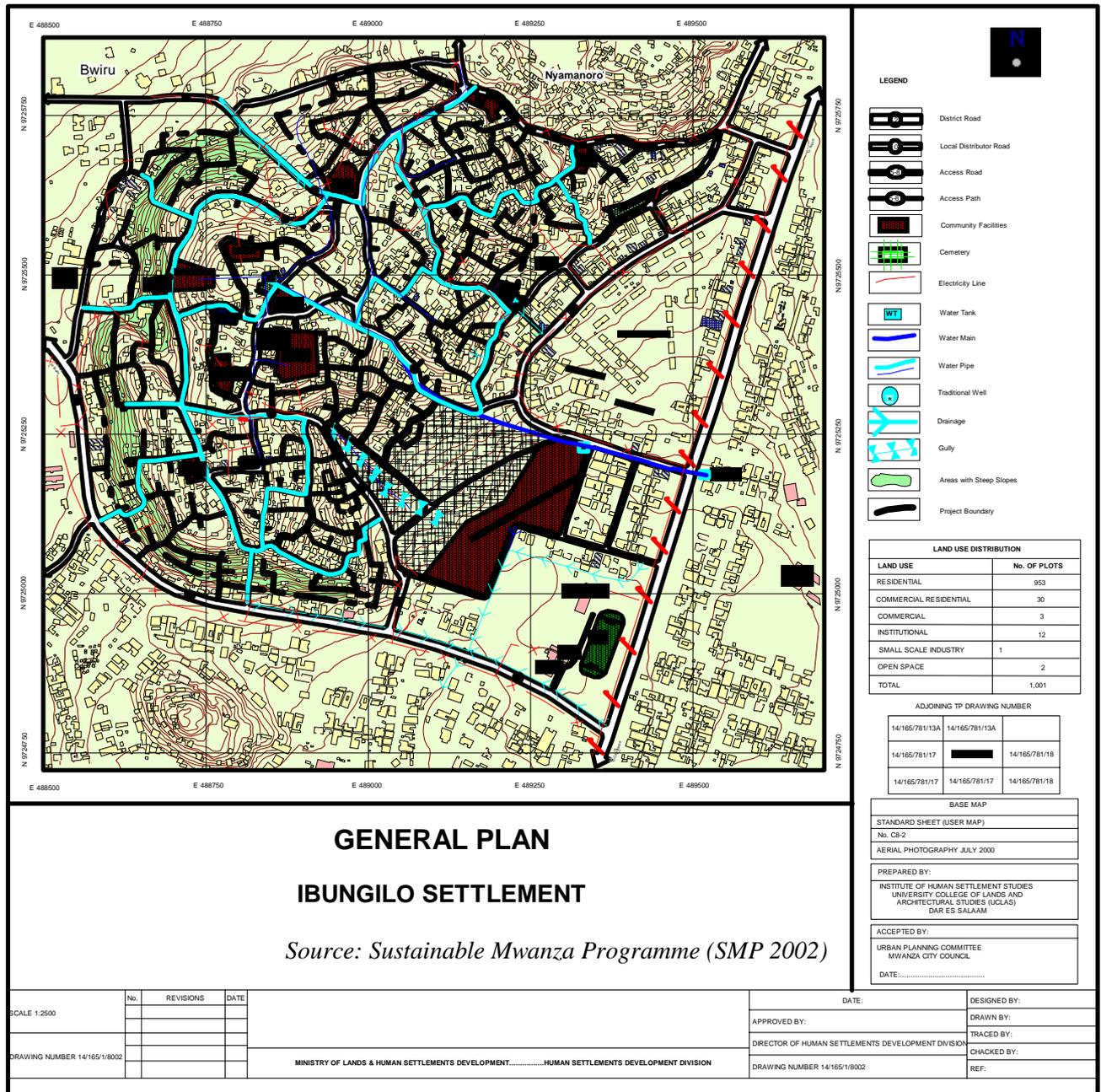
Ibungilo settlement is located 5 kilometer from city centers with 76 hectares. The settlement is a mountain in nature. It has a total of 849 households and 4,245 people, in which 2,420 are women and the rest are men (URT, 2002). Among 849 households, 269 comprised landholders and the were rest are tenants (Map 1).

### **2.2 Criteria for Study Area Selection**

Ibungilo settlement had involved in land regularisation and therefore easily to document process, action and role played by different actors in housing development and improvement. The case experiences land use disputes, poor accesibility in terms of infrastructure service facilities and to financial institution for longterm morgages, and increased informal housing

land selling and heterogenous tribes. It is also the case where members charted strategies to decide on housing improvement, urban planning standards to be adopted both aiming to reduce poverty, land vulnerabilit and therefore enhances community growth process. Other criteria were availability of information, manageable size in terms of area and population, fear of eviction of residents, rapid settlement growth in terms of housing development and were potential candidates to illustrate linkages between urbanisation and urban governance

**Map 1: Ibungilo Settlement: Location and Community Agreed Land use Plan**



## 2.3 Social Economic Setting

The population of Ibungilo informal settlements are largely comprised people from various tribal backgrounds, with diverse social, cultural, economic and ethnic beliefs. These include Zanaki (3%), *Chagga* (40%), *Waarusha* (7%), *Matumbi* (4%), *Zaramo* (6%), *Kurya* (24%), *Jita*(7%) and *others* (10%). The mixed social set-up seems to have created conducive metropolitan environment, which in turn, has helped in land regularization process and housing development in the settlements. The presence of tribe groups, religious groups, women credit solidarity groups have also, constituted important source for mutual contribution in land use planning processes.

The major economic and income generation activities carried out in the settlements include gardening, along Bwiru river (i.e 8% of the population) in Mwanza. Others activities include business (34%) such as retail shops, garages, hotels and restaurants, petty trading, animal and poultry keeping. Additional subsistence activities include off-farm activities such as carpentry and the sale of the processed building wood employ (10%) of residents while (42%) noted has formal employment. Therefore, the study observed that 25 % of the landholders were employed in formal sector while the rest informal sector. This employment rate signifies the importance of consolidating informal sector in housing development.

## 2.4 Field Methods and Data Collection

Both secondary and primary data were collected. A total of 1204 landholders and tenants were interviewed and their plot demarcated (i.e. 1049) in these case 820 respondents was men and the rest were women. Prior to plan preparation a series of 4 consultative meeting and one workshop with donor and Mwanza City council were held with UCLAS consultant. Field preparation including Maps, demonstration, literature review, establishing contacts, training of field assistants and buying of equipments. Kiswahili language was used to conduct the interviews using questionnaire in both cases

Data collected were analyzed using Statistical Package for Social Science (SPSS) and presented as text in Microsoft word. Other tools including Mapinfo Software. Throughout the analysis, data were differentiated regarding roles and responsibility actors. This helped in understanding on collective actions and socio-ties potential for the success of the case, policy opportunities and challenges in understanding community growth process, land vulnerability and poverty reduction influencing factors adopted by local communities in the case.

## 3. RESULTS AND DISCUSSION

### 3.1 Landholders and Government Attempts in Settlement Improvement

Tanzania has been coordinating and controlling urban land development by the use of Master plan approach. Under this approach, 1978 Mwanza Master Plan was drawn in which, Ibungilo settlement was zoned as hazard land and area for being conserved. It should be noted that Master Plan was prepared without taking into account landholders views, preference and

inputs. The 1979 plan proposal for Ubungo Darajani was not implemented at the time and this observed by lack of finance to the City Council. The interviews with Subward leader revealed that majority of landholders were not even aware of the existence of such a plan. Many continued to subdivide their land for sale without regards to the 1978 plan proposal.

In 1999, the government declared the need to acquire this neighborhood land for the function mentioned. Use of top down approach, in which landholder's were exclusiveness led to non compliance with community priority needs. The exclusiveness of landholders attributed to increasing informal housing development. It also contradicts with country policies and legislation including Land Act (Sec. 56-60), which requires community involvement in land regularisation, and upgrading processes. However, it should be noted that the master plan, zoning remains valid until the local community initiate re-planning initiated by land residents after housing development increase in the area without control. This provision in which some of residents were informed and therefore community initiated project to engage in then regularization process were started in 1999

Using the master plan approach, the government through land authorities has planned the 20% of land, which observed by the time conducive for residential housing (i.e. 56 plots) and left the mountain area as hazardous (Map 1). Residents tends to acquire the named hazardous land zoned informally and later on the house become saturated with permanent housing constructed in the area (Map 1)

Through landholder's consultation with local authorities and increasing of fear of eviction, and resident living in the area for more than 12 years, it was difficult to evict. Therefore settlement improvement through land regularisation was adopted in effort to enhance their security of tenure. This goes with policy changes and constitutional right to own land.

### 3.1.1 Policy Guidelines Governing Housing Development and Land Regularisation

The main policy governing housing provisioning and land development include

- Homeownership policy of 1982
- Town and Country Planning Ordinance of 1956 revised in 1961
- Land Act of 1999
- Human Settlement Development Policy of 2000 and
- Housing Development Programme of 2003-2013.

### 3.1.2 Homeownership Policy of 1982

Since independence to earlier 1990, the government strategy for housing provision has based on the government action as provider and not a facilitator. With this respect different institutions formulated including National Housing Construction (NHC), which used to construct house and rent to government officials. The houses were provided especially to government officials and low income outside the formal employment left out. The group observed struggled to have land for their own house construction and therefore enhances

informal housing proliferation. The changing of the policy to encourage homeownership houses encourages people to have their own houses. The government planning system seems failing to provide planned and serviced land to guide housing development. This observed resulted in inadequate financial capacity of local authorities to provide the service. Thus, housing themselves character dominated in the city.

### 3.1.3 Town and Country Planning Ordinance of 1956 Revised in 1961

Town and Country Planning Ordinance of 1956, provides potential environment for housing development. It is ruled by, zoning regulation differentiating land use using -low, middle and high densities from other uses including industrial. Low-density zone (200-160) medium (600-1200) and high density (200-800m<sup>2</sup>) proposed. The practice in the case shows only 35% of Land were planned and serviced while the rest were not. This limited community growth process and enhance land vulnerability to majority (65%) of landholders in the case study in terms of exposing to diseases and financial institutions benefits.

### 3.1.4 Land Act of 1999

Land Act of 199 provides settlement in housing improvement in informal settlement through land regularisation strategy (Sect. 56-60) *section 57 (2)(a-i)* The key pre-request for informal settlement to involve in land regularization includes;

- The area should substantially built,
- The area should lacks apparent lawful title of its residents,
- Land is occupied under customary,
- The area is ripe for development,
- Landholders have lived in the area for substantial period of time
- Existence of a substantial number of residents who have invested in their houses.

Ibungilo informal settlement meets a number of these provisions and in principle qualifies for regularization.

### 3.1.5 Housing Development Policy of 2000

According to human settlement, it encourages also housing improvement and provision through coordinated and participatory approach. It encourages private sector and financial sectors in the country to assist rural community in housing construction. However, attempts have made by NHC and other sectors including National Social Security Funds (NSSF) for build and transfer modalities. However, houses constructed seem to be more expensive for urban poor to afford i.e. approximated 10,000 USD, which is difficult for an urban poor spending less than 1 dollar to afford. Thus, it has observed majority of these houses acquired by high income living in the city and left the poor constructing their own houses using tied capital in informal land areas.

### 3.1.6 Housing Development Programme of 2002-2013

According to housing development programme, it calls for private sector involvement in home provision. The government argued to supply planned land for housing provisioning. In meeting this goal, Mwanza city has adopted 20,000 plots project aimed to provide planned, service and surveyed plots to its residents to cater for demands for land for housing.

### 3.1.7 National Strategy for Growth and Poverty Reduction of 2005/06

Poverty Reduction Strategy in Tanzania, put in place in Tanzania since 1998. Housing sector and settlement planning were not included as an intervention for poverty reduction in both urban and rural settlement from 1998 to 2004. The strategies concentrated on ensuring access to land and ownership and lacks housing provision strategy as a poverty reduction as stipulated in Human Settlements Policy of 2000. This limited landholder grants process and aids or support by the government to ensure housing is provided according to planned for low-income group in informal settlement. The 2005/2006 poverty reduction strategy earmarked by three strategic clusters namely;

- Growth and Reduction of income poverty
- Improvement of quality of life and social well-being and
- Governance and Accountability.

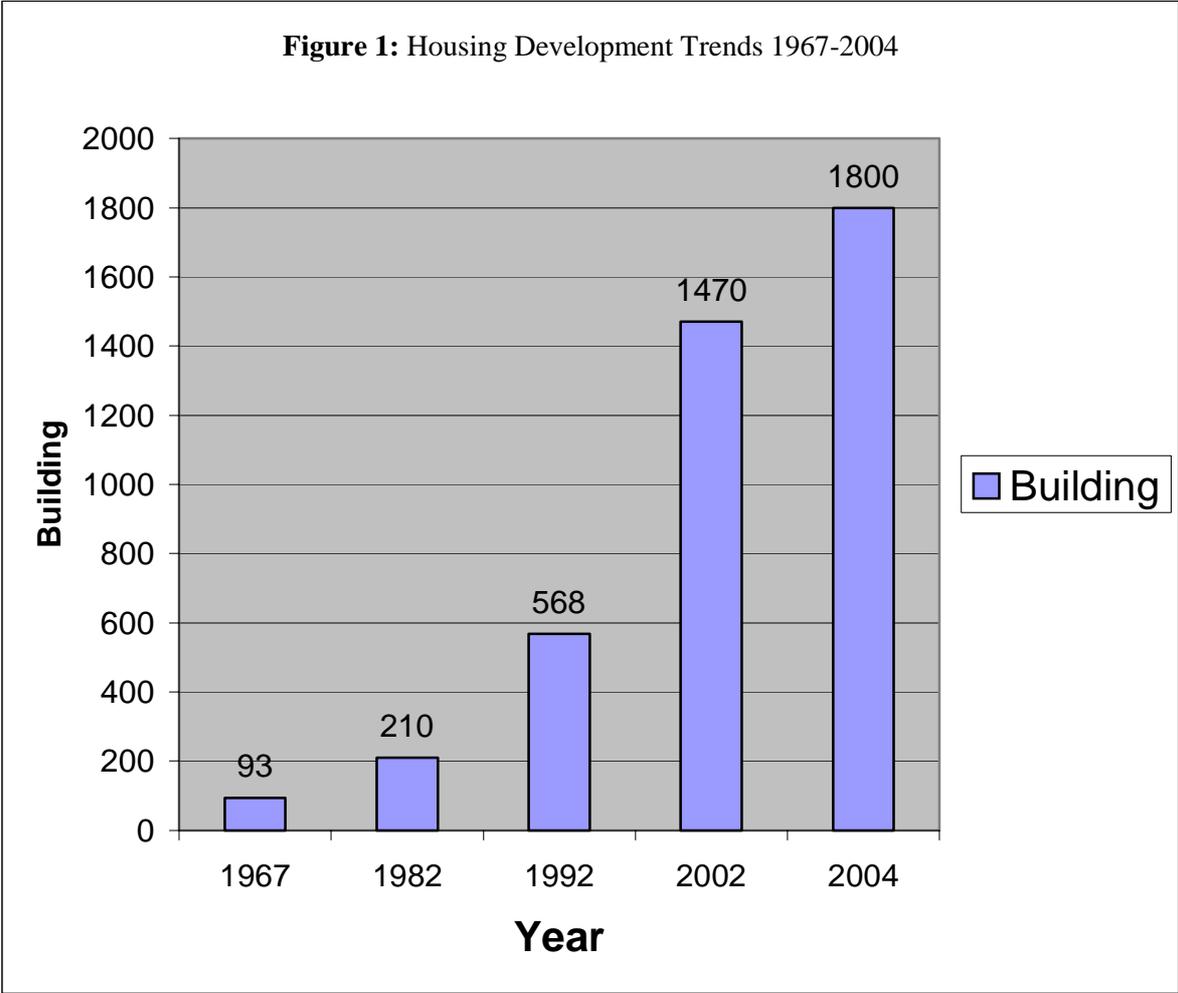
Housing provision observed to be a n income generating activities and a social and economic asset for enhancing community growth process, reducing vulnerability and therefore help to contribute to National strategy for poverty reduction. However, in this regards planning and human settlements including housing improvement through land regularisation put in place as a poverty reduction strategy for public building development. The strategy therefore requires increase availability of serviced plots, public-private partnership in the provision of low cost, high-quality solid services emphasizing provision to vulnerable groups and design and construction of new public building are passable and accessible to people with disabilities.

## **3.2 Processes in and on Decision Making in Housing Provisioning and Land Regularisation Processes for Settlement Improvement**

### 3.2.1 Housing Development Pattern

The aerial photography of 1967 shows that only 93 buildings existed then, the rest of the land was a forest. The aerial photographs of 1982 show that there were 210 buildings. In 1992 aerial the number of houses increased to 568 buildings and 1470 in 2002. An updated map of 2004 revealed a total of 1800 buildings. The 2004 updating shows that only 30 buildings were making a total number of buildings to be 1800 houses (Figure 1). In recent years, land subdivision and transaction have been declining, due to increased housing density. This underscore the need to put in places a mechanism of checking land subdivision and development in informal settlement, so as to check excessive densities.

The interviews showed that non-adherence of local norms or laws requiring house resulted into builders to obtain a permit from Local Authority has resulted haphazardly house construction and encroachment on public areas. Such development has led to deterioration of quality of settlement services such as water, poor access, sanitation facilities, poor solid waste collection. It is difficulty for cess emptier to reach some areas due to poor access roads and enhances residents' vulnerability to diseases and other health impacts.



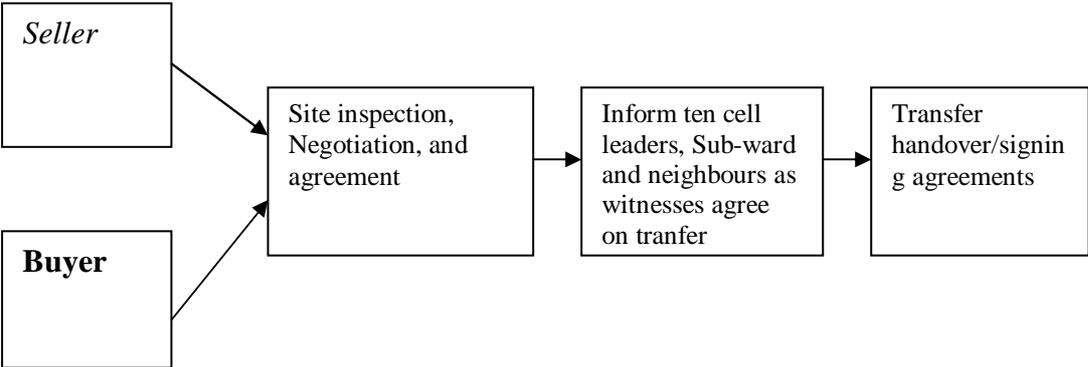
**3.2.2 Land Acquisition, Parceling and Transactions**

The chronological documentation of land parceling and acquisition involved buyer and the sellers (Figure 1). Land transactions followed informal land development pattern. The informants reported that the agreement in land transaction deals was between the buyer and the seller, local leaders and neighbours were involved as witnesses.

Informal land transaction were said to be preferred because they are cheaper and not bureaucratic. A respondent who had bought land when asked why he preferred land in the informal area said:

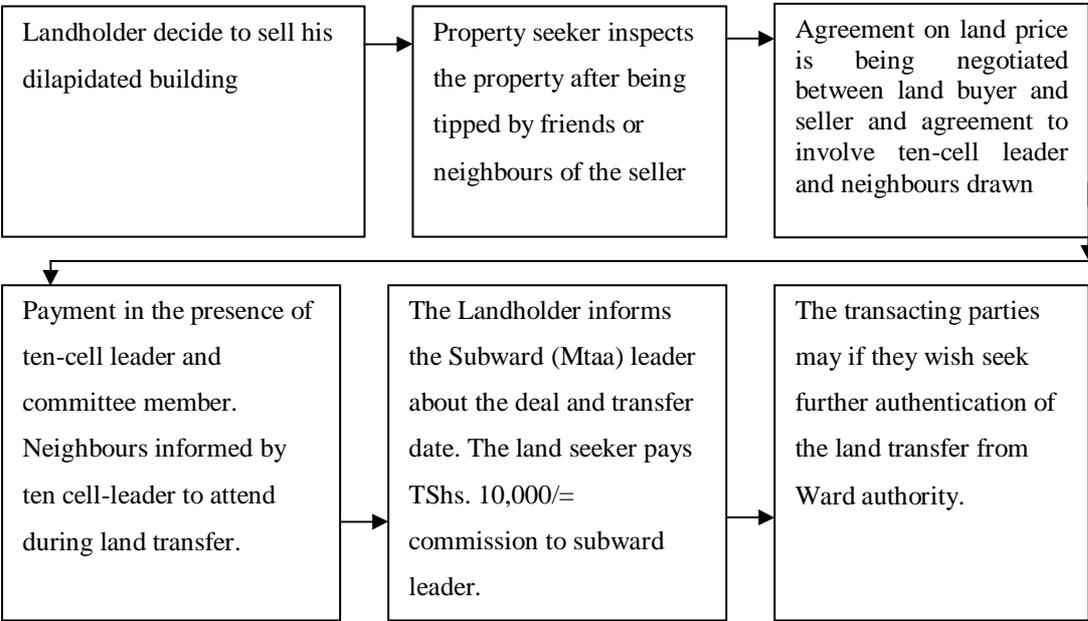
*“I tried to get land in Nyamonoro and Bwiru planned area in 1992, I found the procedure to be longer and fully of red tape bureaucracy. In this way, I opted to get land in this area because such red tape land transaction did not exist and the land deals is between the landholder and seller which made life easier”.*

**Figure 2:** Land transfer and parcelling process



Interviews with Ward leaders revealed that another mode of land transactions include drawing of land selling or transfer agreements was also on use. In this case a ten cell and Subward leaders play more active roles in the process. They liase with neighbours of a would be land seller and authenticate confirm ownership and witness payment and handing over (Figure 3)

**Figure 3:** Informal land transfer and parcelling at Ubungo Darajani



In terms of land conflict and resolution, the study observed that, ten cell leaders are resolving land disputes, using ten cell committees. The committee comprised of ten-cell leader as a chairman and other settlers selected by members in the cluster. The study observed that it has been difficult for local authorities to resolve land use conflicts including boundary conflict. This is noted because the land is not well demarcated and therefore difficult in meeting such conflict. However, referring the parties in conflict to the local leaders is a common experience.

### 3.2.3 Land Demarcation Systems

The study observed that, landholders use narrow trench surrounding the house and dominant physical features such as tree, tyres, bush poles or other physical boundaries such as walls and fencing is used to demarcate individual boundaries for defining property boundaries. In the absence of cadastral surveys, land conflict, fear of eviction observed provide shock to local communities in the case. In the densely built up areas, boundaries are less conspicuous. In such areas often plots owners refer to imaginary middle line running between eaves of houses. So far these fixtures seem to have been more or less acceptable and fairly effective in demarcating boundaries.

Community success in land use planning process and increasing permanent houses construction have led to increased land values and prices. At present it is very difficult to buy unbuilt piece of land in the area but one can get or buy a dilapidated building. This fetches between 3,000USD and 8,000 USD if it is along the main roads. A dilapidated building away from the road, fetch 2000 USD. Informants reported that in 1990 a piece of land measuring one acre (4000 metre square) was sold between 50 USD and 80 USD. In 1996 it was between 120 USD and 200USD. In 1999, it went up to between 300 USD and 1,500USD. In 2003 it was difficult to get a vacant plot on sale in the settlement. The land price changes in the settlement affects community growth process taking place in the settlement. However, service such as water has been improved through local community resource mobilization and therefore reduces poverty.

Formal Access to land to majority of landholders observed limiting community housing construction. The major land acquisition means observed include Inheritance (30%), invasion (42%) and offering from relatives and friends through land subdivision (28%). However, type of housing constructed observed having the following characteristic.

- Use private savings to buy land and construct houses
- Small-scale individual unit construction
- Existence of mixture high income building covering 40% of the total housing stock i.e. 1800 buildings noted in 2004. The rest are permanent rent good condition (55%) and only 59% are dilapidated housing construction rent mud and pole
- Inadequate service provisioning including water, road and are slowly improved through local community initiatives

- Tied capital house construction which took long time to be finished
- Characterized by unfinished and unoccupied building, which undergo safely of the area in terms of being disease and crime colonies.
- Lack of financial institutional involvement in providing long term loan for housing
- Lacks services such as land-use planning and infrastructure development
- Housing construction lack specific guidelines in the construction of their houses
- House plans and building styles depend on individual choice and economic ability
- House development takes longer period to be completed.

### 3.2.4 House Construction Processes

After acquiring the plot for house construction, house development is initiated and financed by the individual housing developer and is built by a small contractor called *fundi* despite the fact that some of houses look like those in planned areas only isolated houses undergone architectural processes. Most of the houses have been constructed basing on the experiences of the small contractors “*mafundi*” and on the desire of individual housing developer.

Findings from Ibungilo reveal that houses from the **1120** respondents equivalent to 93.3% were own constructed from personal savings and small business, 5% constructed after their owners paid pension funds, 1.7% of the house were constructed after getting loans from their employer. The proportion of owner occupation shows that the tendency to build houses becomes higher. In the study area the construction of houses take a combination of means one of them being of “building while saving” because the construction of the house usually takes an incremental approach and is built over long periods of time. Sometimes, individual housing developers move into incomplete houses and continue the development process slowly depending on the availability of finance. There are two approaches being adapted by the individual housing developers in house construction these are incremental and non incremental approaches.

Incremental development often takes a horizontal form in that construction starts at a foundation level and continues in stages to roofing and finishes, even if it takes a long period of time. Incremental development also includes lateral development, which entails construction of a core unit. From the study it was found that 93 (77.5%) respondents adopted the incremental approach in their house construction. Sometimes, individual housing developers move into incomplete houses and continue with the development process slowly depending on the availability of finance. The motive for such a mode of housing ranges from the urge to own a house, on the one hand, to the underlying basic problem of lack of adequate housing on the other. Lack of adequate housing has led to high rent charges for available housing and has been a key driving factor for the need to develop individual housing.

Occupying incomplete house with the hope that development process would continue, this situation do take a long period of time particularly for the low income group whose life depend much on their unstable informal sector from which meagre amounts are saved for house construction after other necessary needs being met. Housing development in any

system include resources like finance, building materials, labour, technology, land, and time. All these resources are essential in the sense that in the absence of any one of them, the development of houses cannot take place.

The period of house construction varies with income of the individual housing developers and economic climate. In most cases construction in this process is done in phases. The phasing of construction by the low income housing developers differs from that of high income housing developers. Low income housing developers build to meet their immediate accommodation needs. Most of low income housing developers start with the most essential space needs, a room or two, while high-income housing developers build for future accommodation needs especially those ones who are provided accommodation by their employers. As a result, high income people phase their projects on differently starting with foundation, walls, roofs, etc. for the whole house.

On the other hand, non-**incremental** development starts with the whole foundation, walling and lastly roofing. Unlike incremental development, non-incremental development does take construction in phasing. This kind of development is mostly used by the high and some of medium income housing developers while majority of the low income category like incremental development. In most cases, low income housing developers who use non incremental approach have proved failure. Results from the findings show that buildings remain unfinished for a long time for them this does not solve their immediate need for housing. From the study it was found that (22.5%) respondents adopted non incremental approach in their house construction. The two below plates of photographs present the two houses constructed with non incremental approach, one looks with different layers of the wall this show that this approach for low income housing developers does not solve the immediate problem of needing shelter.

The percentages of the occupied houses in Ibungilo, majority of individual housing developers about 77.5% occupied their unfinished (uncompleted) houses this category belong to incremental approach and about 22.5% of individual housing developers occupied their houses when they were completely finished.

The study observes among other funds for financing housing is not from conventional financial institutions but from own savings over a long time from meager salaries and income from petty and small enterprises, and loans from friends and relatives. This has led to the result that house construction is carried out slowly over a number of years. Sometimes construction is undertaken when funds are available, and when fund are not available construction stops and can only be resumed when another injection of funds becomes available. The situation that has made majority of individual housing developers to occupy or let out their houses as soon as it is roofed to save on rent or get rental income, which help complete the house. Some houses remain incomplete for many years even when they are occupied. Where a house takes so many years to be completed and occupied, capital invested so far remains idle and therefore non-productive. The opportunity cost of such resources remained idle is quite high in most of the developing countries. This idle resource is

manifested in relatively high house prices, which make the house affordability problem even worse.

### 3.2.5 House Types

The common house type in Ibungilo, the field study reveals that about 118(98.3%) of the houses are detached houses. Unlike in other settlements where Swahili house dominates, within this settlement most of the houses are constructed with less consideration of architectural expertise the most actors who carry out these activities are house developers themselves and the small contractors known as “*mafundi*”. Most of the houses are built without proper arrangement, which make even difficult to do informal settlement upgrading and therefore enhances residents’ vulnerability to disease, environmental degradation and sanitation facilities. Some the houses found in the study look alike as those in the formal settlements. During the field survey conducted in the study area it was revealed that most of the houses about 42 (35%) houses have 4 numbers of rooms.

**Table 1:** House types in Ibungilo

Category	Number of houses	Per cent (%)
detached	1759	97.7
Semidetached	40	2.2
Multi storey	1	0.1
Total	1800	100

### 3.2.6 House Quality

The study defined quality of the house in terms of the building materials, conditions of the walls, windows, doors and floors and the age of the structure. Despite the fact the majority of the houses were constructed by the use of modern material, the study conducted reveals that about 44.2% houses out of 1800 houses (Table 1) studied were in poor condition, (42.5%) are in moderate condition and only (13.3%) are in good condition. Here one can argue that the construction of the house that emerging in Ibungilo is what individuals or households had been able to construct from their meagre income obtained in informal settlement. The study reveals that it’s the income of the household that determine the quality of the house, most of houses with poor condition are belonging the low income category. Through observation some of houses were missing windows only the curtains were used as windows, doors were in poor conditions and some of the houses were constructed by mud and poles although were roofed with corrugated iron sheets. Therefore the income has a great impact on the quality of house being constructed.

## **3.3 Contribution of Different Actors in Housing Construction and Settlement Improvement**

Different actors including landholders, tenants, civil society, media, central and local government and donor community (i.e DANIDA):

Landholders, tenants, local and community organization leaders, and consultants were participated in meetings, labour in terms of service improvement and land selling and authentication. The Subward chairman mainly chaired meetings while the community organization leader remained a key player as a secretary during land use plan preparation meetings. The community organization leader reported and organized the following events after a consensus reached by community development committee and local leadership.

Tenants informed landholders living outside the settlement about decisions made during various community meetings in settlement improvement. In this regard tenants were not acting or involved as beneficiaries but actively participating actors. The existence of common problem (i.e. increasing boundary land conflicts, lack of disposal sites, floods during rain season, poor vehicular access, fear of eviction due to lack titles) and commitment among the community members to improve their living were critical in the successes observed.

### **3.4 Media**

For a long time media has been exclusively involved in disseminating good practices in housing provision, urban planning practices and other land related practices. The study observed that the media has a valuable potential role in disseminating land development information, facilitating genuine data base and holding the government accountable to its commitments through hardly integrated in urban planning system. However, under this situation poverty reduction strategy programme, provided that national conditions allow access to information and freedom of expression, it played also a great role in disseminating the impact of haphazard housing construction and create awareness to local communities on the project and therefore have a vital role to play in reducing land vulnerability and poverty reduction. However increased technical capacity in terms of land management and the need for training the same observed important.

### **3.5 Civil Society**

This group refers to private sector, CBO's, women association which played a key role in housing development and keeping government and elected officials including ward, Councilors accountable for local development. Also, the community organization has played a leading role in the entire process include in making day to day follow-ups on decisions made by community on land development and management issues, resolving land conflicts, sensitization and mobilization of the local resources such as funds and labour, and awareness creation. With these respects balanced relations of the central government, civil society and development partners observed rational for housing development, improvement and legitimacy and therefore reducing land vulnerability and poverty. However, land policy changes as discussed earlier have improved housing development in informal settlements.

Central and Local government play a key role in approval and endorsement of reguralisation plan respectively for enhancing settlement development. In summary the process involves

- Initiation and follow-up done by local community leaders including CBO's
- Local Consultation with local authority and donor community (Danida)
- Contract were drawn to the consultancy and project implemented started
- Community mobilization, General and detailed plans preparation through community negotiation
- Cadastral survey were done through individual bases in which a total of 24 landholders has surveyed their plots and secured title deeds after plan approval in 2002.

The major constraints observed are lack of established conditions in housing construction after the plan approval in terms of plot coverage ratio monitoring in the case. This aggravated by inadequate policy enforcement on the plan increases residents' vulnerability in accordance to continued housing construction. This increases poor sanitation facilities allocation. The study showed that, sanitation and housing construction, placed in Engineering department, the situation which endangers enforcement and therefore increases risks accumulation and disaster occurrence. This showed poor institutional collaboration inn guiding, facilitating and controlling land development.

### **3.6 Housing Themselves Challenges to Growth Process and Land Vulnerability and Poverty Reduction**

#### **3.6.1 Lack of Housing Finance from Financial Institutions**

Based on housing as a economic good. It is one of the capital investment from which the scarce resources and time spent is scarce. Lacks of housing finance results to some of houses constructed are not completed and insecure in terms of lacks title deeds, implies that capital invested is staying idle and sometimes are lost because some of the buildings are only left with erected walls and are not qualifying to be given long term loan for housing construction. With the lack of housing finance to complete them, buildings which are poorly constructed and stayed for a long time some of them get cracks and finally collapse resulting to the wastage of the invested capital. This retards the efforts and initiatives being done by the individual housing developer in achieving a decent house, because individual housing developer would have expected to return the invested capital through rent for some of the rooms or to solve his immediate problem of having a shelter. On the other hand the situation leads to the loss of revenues which would have been collected by the local authority through property taxes that could have contributed to the income of the local authority for development purposes.

#### **3.6.2 Social Effect**

Lack of house finance for house construction have also the negative implication on social aspect, some of the house constructed are been occupied while they are uncompleted. While individual housing developers hopping that the construction would continue while the house is already occupied this has led to an endless house construction. This situation has an effect on human health because of the environment from which these houses are occupied some of

them are in poor and bad condition. This was revealed from the study, that some of the houses were missing windows and doors which is unsafe and insecure only cloth curtains were used instead of finished windows this create uncomfortable environments for the dwellers.

### 3.6.3 Lack of Technical Assistance in House Construction

Housing finance invested in housing construction determines the type of the house and the building materials to be used. Majority of individual housing developers belong to the low income category in Ibungilo. House quality has direct relationship with the funds accumulated for housing. House to be built includes architectural drawings, materials to be used and landscape drawings relating on the surrounding environments all of these depends on the availability of the funds being accumulated by individual housing developers. From the finds it was observed that many of the houses constructed in Ibungilo were lacking architectural expertise and landscape considerations, their constructions were only based on the small constructors' experience. Although many of the house were constructed by the use of modern materials i.e. concrete block for the walling and roofed with corrugated iron sheets but their condition are poor with absence of ceilings, not plastered and are of substandard. This shows that the quality of the house is defined by the housing finance invested by the household in house construction.

### 3.6.4 Income and Expenditure Pattern for Poverty Reduction Measure

The obtained estimate on income and expenditure of the households within the study area were based on nine (9) income range groups were recorded and then the mid point for each income group was established, from which the 1204 respondents were interviewed and the results were recorded. Sources of the households mostly come from the informal activities and other small business being carried daily, it was from here where the maximum amounts being obtained daily and then the maximum and minimum amount of income earned per month by the household were easily calculated. Sources of income include food vending, carpentry, selling charcoal, video shows, restaurants, tailoring, and small shops (shop kiosk), selling coconuts, tomatoes, spinach and other vegetables at the local markets.

The reason to why the income range were used was due to the stated amount being obtained by the household daily ranging from 2,000 USD to 5,000 USD depending on the type of business and availability of customers. In some cases it was found that not only one person who engages in the business but also two or three from one family example when a father operates small business like kiosk, the mother engages in food vending activities "*mama lishé*" and the first born son operates hair cutting saloon. The income obtained from all these activities were taken as the income of the household per day which were then manipulated to get the income of the household per month enabling the family construct the building.

The analysis of income based on 1204 respondents, showed in the table 2. However, the study also observed that a majority of the households about 31 respondents ( 25.8%) there income range was between 120,000 -135,000 USD per month at least earning 4,000/= USD daily as

the total household income from different sources of activities being done by household members.

**Table 2 :** Household income per month in Ibungilo

Income range USD	Midpoint	No. of respondents	Percent (%)
45,000.....60,000	52500	180	15
60,001.. .....75,000	67500	201	16.7
75,001.....90,000	82500	51	4.2
90,001.....105,000	97500	151	12.5
105,001.....120,000	112500	130	10.8
120,001.....135,000	127500	311	25.8
135,001.....150,000	142500	70	5.8
150,001.....165,000	157500	60	5.0
+ 165,001	+ 165,001	50	4.2
Total		1204	100

On the other hand the expenditure was estimated under the basis of daily requirements of the household and the total expenditure. Expenditure was estimated through the following the items: - food requirement, clothing, rent, medical, transport, education, charcoal and kerosine, water requirement, entertainment, drinks and others (Table 3). From the two tables, income and expenditure tables the household can spent up to Tshs 124,950/= with given the total income of the household range from Tshs 120,000/= to Tshs 135,000/= for the majority can save only not more than Tshs 10,500/= which is about 7.4% of the total income. This shows that the low income can only save small amount for shelter development in this situation the low income group can take the whole life investing in shelter development if the situation is not intervened and the dream of the low income people to own a decent house can not be possible.

**Table 3:** Household expenditure in Ibungilo

Item	Tshs	No.of respondents	Percent (%)
Food	22,400	325	27.5
Medical	7,600	30	2.5
Rent	10,500	130	10.8
Transport	11,200	150	12.5
Education	16,300	100	8.3
Clothing	12,300	180	15.0
Charcoal/ kerosine	8,500	70	5.8
Water	9,800	130	10.8
Entertainment	11,700	20	1.7
Drinks	7,300	19	0.8
Others	7,350	50	4.2
Total	124,950	1204	100

### 3.7 Factors Observed Enhancing Land Vulnerability

Generally the loans obtained in these countries are from personal savings, relatives, employers and moneylenders. Majority of individual housing developers do not have access to conventional finance for housing. The interest rate for financial institutions is 16 -18% a

year that is too high to be charged by the commercial banks and this is only extended to customers working in formal sector. The implication is that the ability of majority individual housing developers is restricted so only the resources for embarking on the house construction come from personal savings. Credit facilities like mortgage finance, which enables households to gain access to long-term loans preferred.

Government failure to co-ordinate individual housing development efforts represents an enormous and unnecessary loss. For example fire occurrences; it is difficult for vehicles to enter in these settlements to provide the services. Others includes communal sanitation facilities due to lack of space for its provisioning. This also exposed to danger of health consequences including diseases. Therefore institutional coordination and policy enforcement in land development and management and socio-economic activities beyond planning needs to be monitored during housing construction and training the same. These will include earlier responses interventions of the government to enforce zoning regulation including building regulation leads to increasing haphazard housing development.

Lack of proper boundary demarcation due to lack of cadastral survey, use of temporary hedges enhances insecurity of residents and conflict which local government difficult to alleviate. In need local accumulation of facts, which can be, attempted best by local leaders. This put the need for cadastral survey enhancement to these areas.

Haphazard housing development in flood plain areas, led to increasing resident vulnerability in the area. However, th type of houses constructed some use mad and pole and therefore use cutting of tree on the mountain and mining stone for having small stone aggregates for construction. In this way affects the climate which dependent on tree for its attraction factor. It also, affects the aesthetic value of the city in terms of greening and therefore affects the ecological system of the city.

On the other due to tied capital in housing construction, it took almost three to ten year for a person to complete his housing structure. This has deteriorated the aesthetic value of the City and become crime colonies, colony for rabbits and crime. This situation observed affecting the city productivity in one way and on the other increased crime and diseases. Others include

The main problems which hinder individual housing developers include

- Unavailability of plot for house construction
- Price fluctuation of building materials
- Houses constructed for a long period of time and resulting unfinished and unoccupied building that observed enhancing crime in cities
- Proliferation of Urban Crime
- Reduced Revenues from Property taxes collections due to poor recoding of housing development

### **3.8 Copying strategies adopted by local Community in housing construction, Settlement Improvement and Reducing land vulnerability for Poverty reduction**

- Adopting land regularization strategies for settlement improvement
- Establishing unwritten norms to limit landholders developing their areas beyond space of sanitation facility provisioning
- Local resource mobilization and acceptability of payment by installment strategy
- Use of CBO's leaders that were part of the Government decision body including City Council Committees. This made their decision-making and priority areas accepted easily
- Use policy reforms and change opportunities to initiated and implement land legalization and upgrading project
- Changing of the government from provider to facilitation should be defined well so that local community can understand. For example it has been difficulty for landholder to enforce their unwritten norms, which guide housing development in the case of non-compliance of some individuals.

## **4. CONCLUSION**

The study shows that, land degradation, Informal housing development also poses a key development challenge for city planners, managers, policies improvement for pro-poor growth and budget in response to recognition of the real needs for settlement planning and management. However, haphazard housing development, poor sanitation, poor access to infrastructure utility and facility, resource depletion, fear of eviction due to land insecurity and therefore increased shocks (vulnerability) are some challenges. The result shows that poor institutional coordination and policy enforcement in land development and management and socio-economic activities beyond planning needs affect climatic changes including seasonal variation of rainfall, affects the ecological system of the city and reducing level of city productivity. However, social capital and networking and adopting land regularization noted important in reducing housing risks and other vulnerability indicators.

## REFERENCES

- Bertrand, R (1999): The Financing of Social Housing Integrating Financial Markets: A view from Developing Countries, *Urban Studies vol. 36 no. 4* Carfax, Washington DC.
- Christian, J.W (1980): Housing Finance for Developing Countries. Illinois, Chicago
- Chambers, R. (1989): Editorial. Vulnerability, coping and policy. *IDS-Bulletin* 20(2), 1-7.
- Halla, F. and Majani, B. (1999a): 'The Environmental Planning and Management Process and the Conflict over Output in Dar es Salaam', *Habitat International*, Vol.23, No.3, pg.339-350.
- Jorgensen (1975): housing Finance for Low Income Groups; With Special reference to Developing Countries. Rotterdam.
- Kamau, P.K (2002): Enhancing Housing Development and Ownership: Prospects for Individual Housing Development in Nairobi, Kenya. University of Tsukuba.
- Kanyama, A. A (1995): Can the Urban Housing Be Solved Through Physical Planning? An Analysis Based on Experience from Dodoma, Tanzania. Lund Grafiska AB, Lund
- Kombe, W. J. and Kreibich, V. (2000): Informal Land Management in Tanzania. Spring Research Series, Vol.29, Dortmund.
- Kulaba, S.M (1981): Housing, Socialism and National development in Tanzania: A policy Framework for Housing Studies. Rotterdam.
- Lupala, J.M (2002): Urban Types in Rapidly Urbanising Cities; Analysis of formal and informal settlement in Dar es Salaam, Tanzania. Tryckhos Universitetsservice US AB, Stockholm.
- Mabogunje, A.L. (1992): A New Paradigm for Urban Development. The World Bank, Washington D.C.
- Majani, B.B. (2000): Institutionalizing Environmental Planning and Management. The Institutional Economics of Solid Waste Management in Tanzania, PhD Thesis, Spring research Series, Vol.28, Dortmund.
- Magigi, W. (2004); Local Community Involvement in Managing Land Development in Tanzania; The case of Ubungo Darajani Informal Settlements in Dar es Salaam City, Msc. UPM Dissertation, (UCLAS)-University of Dar es Salaam
- Pretty, J. and Ward, (2001): 'What is Social Capital', *World Development*, Vol. 29, No.2, pg. 209-227.
- Robert, D.P. (1994): Making Democracy Work, Civic Traditions in Modern Italy. Princeton, New Jersey.
- Kombe, W. J. (1995): 'Community Based Land Regularisation-Prospects for Decentralised Planning', *TRIALOG*, Vol.55, pg.27-31.
- Makongoro,S.M (2002): Urban Housing and Poverty Alleviation in Tanzania. DUP, Tanzania.
- Magigi, W. (2004); Local Community Involvement in Managing Land Development and Management in Tanzania; The case of Ubungo Darajani Informal Settlements in Dar es Salaam City, Msc. UPM Dissertation, (UCLAS)-University of Dar es Salaam
- Nurul Amin, (1997), Formal and informal sector Paradigm, *Urban development dialogue Vol,6*

- Obrist, B. (2004): Vulnerability and Human Security. Transversal Theme NCCR North-South IP4, IP1, IP7 Presentation at the NCCR North-South Symposium in Thun, Switzerland, August 26-27, 2004.
- Pascal De Decker (2002): On the Genesis of Social Rental Agencies in Belgium; *Urban Studies*, Vol. 39, No 2: Carfax Publishing, Washington DC.
- Topfer, K. (2002): Re-assessment of Urban Planning and Development Regulations in Africa Cities, Habitat, Nairobi.
- Sustainable Mwanza Programme (SMWP 1998): "*Mwanza Municipal Environmental Profile*", Mwanza, Tanzania
- The World Bank (1986): Urban Development Research at the World Bank - UN; the Case of Housing Finance. Water supply and Urban Development Departments.
- URT, (1956): Town and Country Planning Ordinance-Cap 378 Revised in 1961, Government Printer, Dar es Salaam.
- URT, (2003): Physical Planning Act, Government Printer, Dar es Salaam.
- URT, (1979): Dar es Salaam Master Plan, Government Printer, Dar es Salaam.
- URT, (1995): The National Land Policy. Government Printer, Dar es Salaam.
- URT, (1999): Land Act, Government Printer, Dar es Salaam.
- URT, (2000): Human Settlement Development Policy, Government Printer, Dar es Salaam.
- URT, (2002): Population and Housing Census General Report, Government printer, Dar es Salaam-2003.
- URT, (1978): Mwanza Master Plan, Government Printer, Dar es Salaam.

## CONTACTS

Wakuru Magigi (MSc. Urban Planning and Management), Assistant Research Fellow  
 Institute of Human Settlement Development  
 University College of Lands and Architectural Studies (UCLAS)  
 P.O. Box 35176  
 Dar es Salaam  
 TANZANIA  
 Tel. + 255 022 - 27 71272, 2775004, 2775026  
 Mobile: 255 744 837 223, 0748 827 552  
 Fax: + 255 22 277 5479  
 Email: magigi2000@yahoo.com

B.B.K.Majani, Associate Professor  
 University College of Lands and Architectural Studies (UCLAS)  
 P.O. Box 35176  
 Dar es Salaam  
 TANZANIA  
 Tel: + 255-022 -27 71272, 2775004, 2775026  
 Fax: +255 22 277 5479  
 Email: dppfa@uclas.ac.tz