Developing New Walk-up Apartments

The Case of Msasani Mikoroshini - Dsm

Tanzania.



George Geoffrey Kimaro

Architect

Ministry of Lands, Housing & Human Settlements Development,

Introduction

This paper aims to develop new walk up apartments in Msasani Mikoroshini, because in Tanzania we have formed our Unit Titles Act in February 2008, the main aim being to build vertically rather than horizontally so as to remove the problems of squatters in our urban areas, thus by walk up apartments I mean those apartments that are built vertically without the introduction of elevators, and according to Tanzania Building Regulations the maximum number of floors allowed for the walk up apartments is five floors. These apartments are normally helpfully and usefully especially for the low income people because the cost of construction is reduced to a great extent by excluding the use of elevators in the design. The proposed apartments will be for rental purposes, but the landowners will own one floor, thus will be given certificate of occupancy and the rest of the floors will be owned by developer who will develop the project, thus the developer will use them as rental apartments to different stakeholders who will be interested to rent. Hence the project is designed to inspire community participation which creates project ownership.

1 Shelter Situation Analysis

1.1 Basic General Data

Geography and Administration

The United Republic of Tanzania comprise of Tanzania Mainland and Zanzibar, it is located in Eastern Africa bordering the Indian Ocean on East, Kenya and Uganda on the North, Rwanda, Burundi and Democratic Republic of Congo and Zambia on the West and Malawi and Mozambique on the South.

The Capital City is Dar es Salaam while the political head quarter is found in Dodoma region. Generally in Tanzania mainland there are 21 Regions while in Zanzibar Islands there are 5 Regions, making a total of 26 regions. Thus it has an approximate area of 945,087 sq km and the Geographical coordinates are 6 00 S, 35 00 E.

Demography and Health

The Current population is about 34.6 million (Population Census 2002), out of this about 16 million are men and 17 million are woman in Tanzania Mainland while in Zanzibar, 482,619 are men and 502,006 are woman. The life expectancy is 48.57 years of which 46.17 years are men and 43.85 years are women (Population Census 2002)

The number of household is about 7 million with an average occupancy of 4.9 people for Tanzania Mainland to 5.3 people for Zanzibar households. Health facilities are randomly distributed to both rural and urban areas whereby the government has set a health program to ensure that health facilities are available down to village level, despite the acute shortage of sufficient medicine and medical staff.

Economy

The economy of the country depends very much on agriculture which contributes about 40% of Gross Domestic Product. The GDP per Capita is \$ 1100 (2007) with 42.8% from agriculture, 38.7% from services and 18.4% from industries. The population below poverty line is about 36% (2002 Estimates). The GNP is 12.7

billion dollars and the GNP per Capita is 350 dollars in 2005. (www.studentsoftheworld.info).

1.2 Shelter Related Fact and Figures

It comprises of access to shelter, access to and cost of basic services/infrastructure and access to and cost of education. Thus, access to shelter is affected by number of factors such as housing stock, housing deficit, occupancy, housing standard, floor area per person, tenure of households, housing construction, building materials etc.

Thus, an overview of the shelter situation of Tanzania is as follows; The existing housing stock is about 7 million units at an average of 4.9 persons per household. This leads to a need of 14 million houses at an average occupation of 2.4 persons per household which is higher than the national target of 2.0 persons per household demanding an addition of about 7 million houses. (Population Census, 2002)

There is a deficiency of 80 thousands houses due to urban population growth rate of 4.2% annually in urban areas, out of which 61 thousands are expected tenants while in rural areas the demand is low. The floor area per person varies from 1.84sqm to 3.75sqm for an average bedroom of 9.0sqm at occupancy rate of 4.9 to 2.4 respectively.

On the issue of occupancy, the private households have shortage of bedrooms. About 70.5% of households have 1-2 bedrooms, while 17.2 have 3 bedrooms, 7.7% have 4 bedrooms while 4.5% have 5 or more bedrooms in urban areas as compared to rural areas where 70.3% have 1-2 bedrooms.

The housing standard is substandard due to the fact that most houses:

- Do not have basic services like electricity and water.
- Need improvement and maintenance
- Built on temporary materials and have poor finishing
- Are very old and dilapidated

The building materials range from local and modern materials, the local include mud, poles, stone, brick, bamboo, thatch etc. while the modern include sand, cement, blocks, concrete, iron sheets, glass and tiles.

1.3 Housing Policy in Informal Settlements

Due to the rapid urbanization there is an increased demand for surveyed and serviced land for housing development in most of the urban areas. The majority of the urban authorities lack capacity to deliver such lands. This inadequacy has forced 70-80 % of the urban population to settle in unplanned areas. The underlying characteristics of these areas include, overcrowding, poor sanitation, unhealthy water supply and lack of infrastructure. The challenge is to create an effective market-based housing delivery system, regularization of existing unplanned areas to enhance both housing and environmental quality as well as prevention of further proliferation of unplanned settlements in urban areas. This policy has been approved by the parliament and the regulations are still in progress to be implemented so as to enhance the role of all actors in the national shelter delivery system.

1.4 Actors in Shelter Delivery and their Roles

The table 1 below shows actors in Shelter Delivery and their Roles

Table 1:

Actors in Shelter Delivery	Roles
1. Government	Policy formulation, setting standards and guidelines.
2.Local Government	Implementation of programmes
3. International/and technical support	Financial and technical support
4.Private Sectors (example Mutual Developers)	Construction of Housing, Provision of Infrastructure,
	Research, Manufacturing and Supply of building
	materials
5.The Civil Society Organizations NGOs/CBOs,	Advocacy and Mobilize community to shelter
WAT, Habitat for humanity	development
6.Training,Research Institutions & Agencies	Carry out research, Offer advisory and Consultancy
	services

Actors who are directly related to informal settlements are NGOs and CBOs and their roles are:

- Raising awareness and building capacity for Tanzanians in housing development.
- Mobilizing communities for self help housing schemes.

 Encouraging community joint action development initiatives between the government and the communities in enhancing housing development in their respective areas.

2 Organisation

The Organization is a Central Government, namely Ministry of Lands, Housing & Human Settlements Development. The ministry comprises of 8 Departments namely; Housing Division, Physical Planning, Land Administration, Administration & Human Resource Management, Surveys & Mapping, Accounts Finance, Policy & Planning, and Management Information Systems.

The Housing Division is the one where I work, which was founded in February 2008. It has two sections, Housing Finance & Housing Development. The latter section is where I am assigned. The roles of this Division in relation to Shelter Design & Development are:

- Coordinate implementation of special and pilot programme on how to construct low cost houses.
- Facilitate in planning and designing of the projects from inception to completion.
- Facilitate Public Private Partnership (PPP) on housing development schemes.
- Facilitate the provision of basic infrastructure for housing development.
- Facilitate the availability of housing loans facilities.
- Facilitate mobilization of financial resources for housing development from both local and foreign services for individuals, public and private institutions.
- Solicit and coordinate internal assistance on housing development including UN-Habitat.
- Facilitate the availability of housing loans facilities.
- Coordinate global efforts on habitat shelter issues.
- Facilitate local authorities to provide affordable rental housing.
- Create a conducive micro-economic policies and tax concessions and incentives to real estate developers in order to motivate large scale housing investment in urban areas

3 Shelter Problem

The slum settlements are not planned and lack basic services. Slums represent the worst of urban poverty and inequality (Kofi Annan; 2003). Slum settlements now occupy 70% of the land area in most of Tanzania's urban areas. Slums are the first stopping point for immigrants and source of low-cost and only affordable housing that enables the immigrants to save for their eventual absorption into urban society (Habitat 2003). Majority of Tanzanians live in unplanned settlements, the consequence of rapid urbanization is the mushrooming of informal settlements /slums - a manifestation of the two main challenges facing human settlements development rapid urbanization and the urbanization of poverty. (UN-HABITAT; 2003)

According to the National Human Settlements Development policy, 60% of all urban houses are constructed within unplanned areas. The major reason underlying the growth of informal settlements is mainly urbanization. The rapid urbanization in Dar es Salaam city means more demand for housing and services. Thus Msasani Mikoroshini is an old squatter settlement which dominantly populated with the low income household. The settlement surrounded by some of the most exclusive residential neighbourhoods in Dar es Salaam. Unlike its immediate neighbourhoods the Msasani Mikoroshoni is a neighbourhood facing the following problems:-

- Overcrowding and high density
- Lack of proper housing
- Lack of infrastructure such as roads, electricity, drainage facilities and waste disposal.
- Insecure land tenure, thus mortgage facilities are impossible.
- Insufficient fund to improve these types of settlements
- Poor design, workmanship, low technology in building construction
- No development control/standards not used.

Hence a need to transform the area so as to ensure Shelter Development is needed to be achieved.

The following are some of the pictures of Msasani Mikoroshini which show the shelter problems discussed earlier:



Poor design, workmanship & low technology in building construction



Lack of proper housing condition.



Poor services as a result of endemic diseases



Overcrowding and high density



Poor drainage facilities

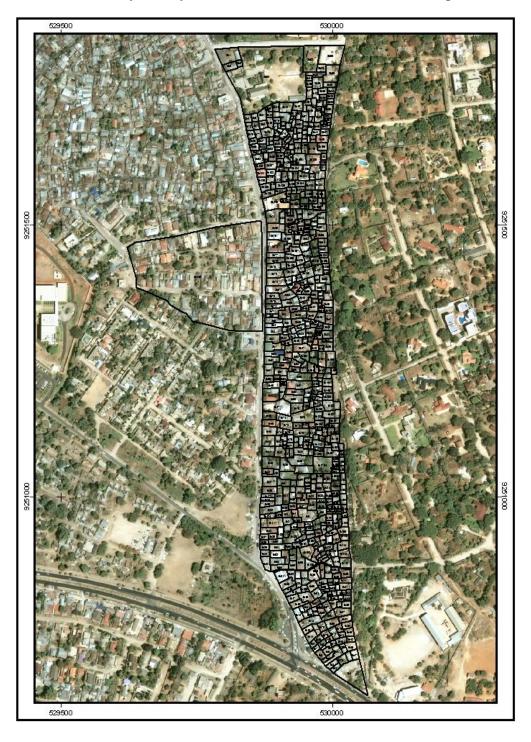


No development control

Situational Analysis of Msasani Mikoroshini

Location

The Msasani Mikoroshini is one of sub ward in Msasani ward found in Kinondoni Municipality, Dar es Salaam. It is located just few km from the city center along Bagamoyo road extends North bordered by Masaki to the North, Mikocheni to the North-West and Oyster bay to the North – East. See the location map below.



Characteristics of Msasani Mikoroshini unplanned settlement

The Msasani Mikoroshini informal settlement slightly differs from similar settlement/other settlements in Dar es Salaam city especially when analyzing income levels, livelihoods, housing characteristics, housing densities, accessibility etc. This settlement accommodates both the low, middle and high income households. The land value in Msasani-Mikoroshini is rising and increasingly becoming suited for commercial and other uses with better return, such as residential for high income medium and low income.

Income levels

Like other informal settlements in Dar es Salaam, Msasani people belong to low income households where majority of residents survive on less than a dollar per day. In recent years there is an increase number of high income households living in this settlement due to housing gentrification observed.

Livelihoods

Informal/ petty trading activities are dominant livelihoods activities. These activities include Restaurants, Groceries, street hawking, Masonry, but also there are residents living through employment and other activities such as retail business.

Accessibility

Large part of this settlement is inaccessible by car due to compact development of which results inadequate roads, sanitation, drainage system and poor maintenance of existing roads.

House characteristics

Residential and commercial activities are the dominant land use in Msasani Mikoroshini. A study by UCLAS (1998) indicates that 89% of the total buildings are residential, 10% for residential cum-commercial and the remaining 1% for commercial purposes. However there are variations due to the housing transformation going on in informal settlement across Dar es Salaam. Houses vary in quality and typology. It ranges from makeshift temporary structures built using temporary materials to permanent structure of solid/permanent materials. In this

settlement some areas are undergoing gentrification with which single storey or multi- storey or modified Swahili types of buildings are emerging.

Amenities

Since, informal settlement depends on private agreement subdivisions and increase without control by Public Authority, Msasani settlement lacks or have inadequate amenities and services provided. These include school, health centre, markets, open space, playing grounds etc. Services such as garbage collection or disposal of waste materials receptor (e.g. Pit latrines, Septic tanks and incinerators) are missing.

Population density

The population density was found to be approximately 350 persons and 38 houses per hectare. This is considered to be one of the densely developed settlements when compared with other consolidated informal settlements for example Mabibo area with 189 persons per hectare, Mikocheni A with 191 persons per hectare and Buguruni with 205 persons per hectare (**Kironde and Rugaiganisa**, 1995:15). Msasani area the average number of habitable rooms per household is approximately 1.8 rooms while the average number of households per house was 2.8 with an occupancy rate per house standing at 11 persons.

Proposal for Change and Improvement

The General Overview of the proposal for change and improvement are as follows:

1. Introduction of walk-up apartments as we have formed our unit titles act of 2008 the main aim being to implement or encourage vertical development, i.e., to build vertically rather than horizontal development so as to remove the problem of squatter in the area (to curb urban sprawl). Walk-up apartments are apartments which are built vertically without the introduction of lifts. According to Tanzania building regulations the maximum number of floors allowed for the walk-up apartments is five floors. Thus on the ground floor I propose to put shops for commercial purposes while from 1st floor to 4th floor, and each floor will have 8 units.

This approach is very good but cost wise Tanzania is donor oriented, thus depend very much from donors in order to accomplish the project and the housing sector is not given much priority in our country, therefore it will be time consuming so we have to wait until we get donor or fund from various institutions.

In terms of acceptability, the project is expected to be accepted since it is a participatory from grass root level and not top down. On the issue of economy, the project may fall a little bit due to economic crisis, but with a good economic growth we anticipate the project to be viable. Also the social economic aspect will generate income to the households due to rental houses or apartments, people will do business and mortgage and eventually increase their economy. And through economy housing conditions will be improved as well.

Also in terms of affordability, the project will be affordable because people will be involved, thus the houses will be decent and affordable.

- 2. Planning of Msasani Mikoroshini area will enable dwellers/residence to get their unit titles or right of occupancy.
- 3. Land use optimization to curb urban sprawl.
- 4. To provide more accommodation for existing dwellers and other interested stakeholders.
- 5. To guide growth of Msasani Mikoroshini in an orderly and harmonious manner.
- 6. Project can be replicated to other areas.

The proposals for change and improvement are divided into phases, these are

Planning Phase: The planning of the area will be done by the organization which is a Central government whereby all the information will be gathered i.e. from pre-planning, conceptual planning, master planning, schematic architectural development and implementation stage. Also the social-economic profile of the community will be conducted through community participation, this will involve technical staffs, various professionals, village leaders and households, thus the occupants/households will be educated about the project and its importance and also there will be a formal training to the leaders, hence both participation and top down approach will be used due to the value of land

and at the same time to adhere with the government goal of implementing unit titles act by introducing walk-up apartments and eventually curb the urban sprawl. Therefore about 621 families will be involved before eviction takes place in a peacefully way, thus an in depth study is needed to understand peoples values, attitudes, interests and aspirations without disturbing their livelihoods and social ties. Hence both qualitative & quantitative approach will be used. (An economic assessment to be included as my future task in the action plan).

- **Designing Phase:** The design stage will involve various people or professionals from different areas such as from private sectors or local government. Also the design will consider users needs within the area, the cultural behaviour of that particular area and social characteristics. The users needs will be defined through community participation, i.e., focuses on what people tell you and what they do. In this regards land owners and tenants are therefore the primary units of analysis because both have effect on housing demands. Also the questionnaires will be asked to the house owners and in case of absentee land lord tenants will be interviewed but a notification will be left behind for the house owner to come forward and confirm what will be filled in the questionnaire. Focus group discussion will also be used as it is a dialogue between the researcher and households/individual or respondent of different status. This discussion will also include sub ward leader, house owners, tenants and combination of house owners and tenants information on housing needs. But various professionals also will be consulted so as their views to be incorporated in project planning and design.
- Construction Phase: During this stage various contractors will be involved to tender and the qualified Contractor will be awarded a tender, also the construction of the project will be conducted through organized self help housing, thus people will be educated on how to construct houses through organised self help. Thus as the project is designed to inspire community participation which creates project ownership, it simultaneously builds the community in a holistic way and creating opportunities such as employment during construction process. The training will involve different stakeholders such as planners, engineers, community development officer etc from the

municipal council since they are key focused or implementers of that particular issue (project). People will contribute both skilled and unskilled labours, unskilled labours will be done by residence of that particular area while skilled labours will be done by technical staffs from municipal councils in order to have sustainable project and eventually meet the intended goal.

• Maintenance Phase:- After completion of the project, there will be an association like home own association for maintaining the buildings and the surroundings, thus there must be a proper design of communal areas to ensure a good system of collecting garbage and a good system of creating safety for children and all people. Thus the municipal people will work closely with the residence/households by providing health education to them on how to do maintenance in order to ensure safety and health within the community.

Conclusion

The Project intends to transform the area into a modern residential and commercial neighbourhood with all the necessary physical and social infrastructures (utilities), so as to improve the living standard of people or Shelter Situation and eventually alleviate poverty in Tanzania.

References

Kironde L

1995 Access to land by the urban poor: A study in Dar es Salaam. Environment and Urbanization, Vol. 7, pp.77

Kombe, W. and V.Kreibich

2007 Governance of Informal Urbanisation in Tanzania. Mkuki na Nyota Publishers, Dar es Salaam.

Tannerfeldt, Goran and P. Ljung

2006 More Urban Less Poor, An introduction to Urban Development and Management. Earthscan, London.

2000 *Household Budget Survey 2000/01*. National Bureau of Statistics, United Republic of Tanzania.

2008 Tanzania Housing Policy, unpublished.

Internet Search

Annex 1

SWOT Analysis Tables

STRATEGIES

SWOT Profile "Realistic List"

S.No	Strength	Weaknesses
1	Proposal/Project can be implemented because it's a Central	New department of housing(still build
	government	capacity)
2	Technical Expertise from the Ministry and Municipal Council	Lack of cooperation
3	Government can have access to get or to secure funds from	Reluctance of some institutions to
	various sources like world Bank, UN-Habitat etc	contribute
4	Existence of initial services like water and Electricity	Reluctance of authorities to
		cooperate
5	Through the proposal, people will have access to own titles	The proposal is not given the
	(right of occupancy)	1st priority to be accomplished
6	The proposal will accommodate more people than existing	Lack of funds to accomplish the
	ones	proposal/project
S.No	Opportunities	Threats
1	Existence of services like water and electricity	Financial problems (Assistance)
2	Getting funds from different sources like donors, real estate	Decision makers/ Politicians
	developers etc	
3	Existence of ward or communal leaders	Unfaithful, non cooperative ward leaders
4	Existence of initial roads and buildings	High cost for reallocating people during
		expansion/development

	Strengths	Weaknesses
Opportunities	S-O	W-O
1	Use Ministry's experts, local government and other	Formulate a task force including all
	actors to prepare	necessary disciplines and involve
	Feasible layout that can be implemented at affordable	various stakeholders from the beginning
	costs taking into account the existing services.	
2	Consolidate the funds allocated by government and	Out source labours for technical
	donors and prepare budget and plan for execution of the	assignments like infrastructure services
	mostly required work (services)	so as to fix changes in prices and
		misuse of allocated funds
Threats	S-T	W-T
1	Design alternative temporary accommodation within the	Share the design proposal with the
	same location for affected people	occupants from initial stage to include
		their basic needs or requirements.