

Space Use and Environmental Effects of Home-Based Enterprises. The Case of Buguruni Mnyamani Informal Settlement, Dar Es Salaam, Tanzania

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Abstract

This paper investigates space use and environmental effects of Home Based Enterprises. The paper shows that the residential houses can provide both home and workplace to generate income. This lifestyle is practiced by the majority of people living in both formal and informal settlements in urban Tanzania. Double-functioning of residential premises as both home and workplace has now become the form of life for the majority in the informal settlements of urban Tanzania, where municipal officials rarely visit for enforcement of the laws and regulations. The state has failed to put in place a policy which supports these initiatives of Home based Enterprises for the poor in the informal settlements. This paper attempts to identify different types of Home Based Enterprises, analyses use of space for both functions i.e. residential and workplace with emphasis on the effect of more functions of a residential house. This paper further, analyses space use under the combination of residential and income generating purposes at Buguruni Mnyamani informal settlement. The paper also presents some spatial and environmental effects of the phenomenon and how residential and income generating functions co-exist, with emphasis on the arising conflict. Empirical evidence from a settlement called Buguruni Mnyamani as a case study area where recently research was carried out is used to examine space use and environmental effects. The case study revealed that there is substantial modification in existing residential houses in order to accommodate the double functioning of the dwelling. Major modifications noted, were observed to be an essential phenomenon. Despite of its important role in improvement of livelihood activities which contribute significantly in income generation and poverty alleviation the operation of double functioning of houses have been observed to raise some environmental effects such as nuisance, overcrowding, blocking natural light, lack of natural ventilation and a number of risks to the users of dwellings.

Keywords: Home Based Enterprises, Domestic Space Use, Informal Settlements

1.0 Introduction

In most developing countries, Tanzania included there is an increase of using the space in dwelling to generate income in different types of Home Based Enterprises (HBEs). All these are carried out in the informal economy which actually contributes to strengthen the livelihood of the poor.

In the 1980's Tanzania has experienced structural adjustment programmes which contributed significantly in reduction of government, retrenchment which means reduction of formal sector job opportunities. Home Based Enterprises therefore contribute towards informal sector employment to bridge the gap of unemployment in the formal sector.

According to Kellet (2002) "the use of residential property for HBE" is extremely common. Even a decade ago it was estimated that between 20-40% of properties in low-income neighbourhoods in developing cities were used for income generation". This is not different for what is happening in urban Tanzania. However all these are carried out without taking into account employment regulations like safety Housing development regulations like proper space standards, provision of ventilation, fire prevention and escape, day lighting, therefore poor living conditions of the people. In the broader field of income generation, a home-based income generation, in this case a home-based enterprise (HBE) is defined as being undertaken from a dwelling and by a household, which is the basic social unit. Home-based enterprises are carried out in spatial setting, that is, within a given dwelling and its broader physical context Ghafur (2001:118-119).

The hierarchical arrangement of spaces that are used in home-based income generation includes, Dwelling (meaning a house), Courtyard, Lane or street (immediate to a given dwelling) abode, the broader neighbourhood and, the public urban spaces.

According to Kellett (2003:3) home-based income generating activities are classified into five groups namely, Sales, Commodities production for selling, Services, activities with social character and activities directly related to the plot and the open spaces. In this paper, HBEs falling in groups namely selling, commodities production for selling and activities directly related to the plot are analysed.

2.0 Methodology

This paper basically uses empirical data drawn from Buguruni Mnyamani informal settlement, together with some literature review data. Buguruni Mnyamani is one of the oldest informal settlements in Dar es Salaam, located 5 kilometres from the City centre in Buguruni Ward. This settlement has been experiencing rapid urbanisation and high demand for rental accommodation that have led to densification of the area, mainly as a result of extension of houses and construction of commercial buildings. Between 1975 and 1989 the gross housing density increased from 25.4 to 35.4 units per hectare respectively. Although the housing density remained more or less the same up to 2002, land development trends, however, show that bigger houses of between four and six rooms are replacing the smaller ones of two and three rooms (Kyessi, 2002). Apart from providing residential accommodation to the households in the settlement, the houses and the residential premises at large are also used for income generating activities. According to Nguluma (2003) many houses in informal settlements in Tanzania have been undergoing transformation, leading to additional rooms for most of the buildings. The intention and result of the transformation process are not limited to extra living space, but extended to space for rental and other income generating purposes.

Data collection methods included photographic registration that captured the real life situation in relation to HBEs operations. Measurements taking were also an important tool for recording the magnitude of space use for HBEs in relation to other domestic uses. Interviews with 33 households residing in houses where income-generating activities are undertaken were carried out.

3.0 Results and Discussion

3.1 Organization of Home Based Enterprises and Home Life at Buguruni Mnyamani Settlement

The use of dwellings for income generation is very wide spread in the study area, except for the flood prone northern part, where home-based income-generating activities are limited as compared to the southern part. Both resident households and non-resident households run HBEs in this area. Almost every house studied has one or more resident household (either a tenant or owner of the house), running at least one HBE. The non-resident owners of HBEs normally arrange with the resident owners for security of their items. If all the owners of the HBEs do not have residential accommodation where there are HBEs, then the residents, particularly the house owners, are consulted and take the responsibility of keeping the facilities. Although the HBEs in the study area vary in type and scale, their spread reveal how households continuously rely on them in earning their living.

3.1.2 HBEs and Space use in the Domestic Setting

Home-based enterprises available in the study area include shops, bar, butcheries, local stalls, charcoal stores and saw mills. Also there are services such as grain milling, tailoring, dry-cleaning, shoe shining and repair, hairdressing, video shows, medical services and mobile phone communication. Other HBEs in the area are carpentry, keys making, charcoal stoves making and motorcycle repairs, together with tea selling, , local brews selling, poultry, restaurants as well as day care and education centres. Shops differ in what they sell. The different products sold include garments, shoes and food. Local stalls sell vegetables and fruits, second hand clothes, utensils and cooking oil.

Spaces where these HBEs are undertaken include both indoor and outdoor depending on among other factors, the nature of the HBEs. The indoor spaces used by these HBEs include the courtyard, bedrooms, corridors and other rooms in the main house. Also some other rooms attached or separated from the main house accommodate the HBEs. The separated rooms apart from providing some sort of exclusive working space they also provide accommodation for some people. In the outdoor space, some HBEs are undertaken in the semi-open veranda at the front of the dwelling in attempt to taking advantage of the commercial opportunities from the surroundings, or because the activities cannot be undertaken inside.

On the same grounds, other HBEs are done just in the open, while others are under shades made of corrugated iron sheets, supported with wooden poles. Some structures are similar to the latter, except that they are normally enclosed with either corrugated iron sheets or wooden materials. This kind of structure is locally known as *kibanda*. Some *vibanda*¹ are movable, especially the ones used in mobile phone services, whereas the ones used for tea-rooms, and charcoal selling are built on the ground.

Most of the HBEs use a combination of these spaces so as to fulfil the various needs of a particular HBE in specific time. For instance, tailors keep their sewing machines in bedrooms after closing the business in the evening. They do that in order to avoid breaking and theft in the business rooms, which are not used for sleeping at night. HBEs such as carpentry and production of charcoal stoves use the open areas, veranda or *vibanda* during the day time when producing or selling the items. At the same time these HBEs use indoor spaces and in some cases the courtyard as stores.

Women entrepreneurs and bites makers normally use courtyards, kitchens, veranda and corridors for preparing their stuffs, and veranda, *vibanda* and spaces adjacent roads/paths for selling the commodities. Storage of facilities and commodities is done both in bedrooms and corridors. The facilities that are kept in the corridor are the ones that are also used by the household in daily life, apart from income generating. They include stoves, utensils and furniture such as stools, chairs tables and benches.



Fig. 1.0: Tea Selling in an Extended Veranda

3.1.3 Plot Sizes in the Study Area

Plot sizes for the 33 studied cases range from 119m² to 448m², whereas the most frequent plot sizes range between 251m² and 300m², followed by plots that range from 151m² and 250m². Plots with 150m² and below as well as plots with more than 350m² are the minority. Table 1 summarises the details.

Table 1: Plot Sizes in the Study Area

Plot size ranges (in M ²)	Number of plots
101 - 150	2
151 - 200	6
201 - 250	6
251 - 300	10
301 - 350	5
351 - 400	3
401 - 450	1
Total	33

Source: Field observation and measurements, December 2004.

3.1.4 Gross Space under HBEs

The gross space used for income generating activities in the field area range from 8.8% to 80.8% of the total plot area. The majority of the plots have a gross percentage ranging from 11 to 30 occupied by HBEs, whereas the plots with less than 10% and more than 80% gross coverage are the minority. Analysis of gross space gives an idea on how HBEs are spread within the total plot area of a studied case. Table 2 summarises the details.

Table 2: Gross Percentage of Plot Space under HBEs

Gross % of coverage	Number of plots
1 - 10	1
11 - 20	9
21 - 30	8
31 - 40	5
41 - 50	4
51 - 60	5
81 - 90	1
Total	33

Source: Field observation and measurements, December 2004.

Based on table 2 the spread of the HBEs varies among the studied plots. Although the variations could partly be attributed to the variations in sizes of the plots, the nature of the HBEs is a very important determinant of the spread.

3.1.5 Net space under HBEs

The net area used by income generating activities in the study area makes 6.3% to 69.9% of the individual plots' total areas. Just as the case was with gross area coverage, the greatest number of plots has a net space under HBEs ranging from 11% to 20% (the modal class). Some variation exists however, whereby in this case the use of the plots for income generating activities is confined within the range of 11% to 40%, as opposed to the gross coverage that spreads from 11% to 60%.

The varying percentages of gross and net coverage reveal sharing of spaces for the income generating activities and domestic purposes. If sharing of spaces did not exist the gross and net spaces under income generating activities would not vary. Table 3 summarizes the details on net space coverage by HBEs in the study area.

Table 3: Net Percentage of Plot Space under HBEs

Net % of coverage	Number of plots
1 - 10	2
11 - 20	13
21 - 30	5
31 - 40	8
41 - 50	2
51 - 60	2
61 - 70	1
Total	33

Source: Field observation and measurements, December 2004

3.1.6 Timing for the HBEs

Almost all the HBEs are undertaken all the year round, also in consideration to the weather conditions, especially for the HBEs that take place in the open. The majority of them operate daily and throughout the day. While the HBEs that undertake sales and service normally start between 7am and 8am, the HBEs related to commodity production start earlier. The number of sub-activities and their time requirements also influence the overall programme of the HBEs, as observed by another respondent:

This task starts with preparation of the dough around 3am in the bedroom, and at 5am frying starts on the corridor, followed by selling from early in the morning under the shade in the outdoor while frying continues.

The whole business closes around 11am, when all the chapatti are already sold (Interview with a lady who owns a house and produces bites)

Similar to the above is the production and sale of local brews whereby more time is used, and the HBE is undertaken almost throughout the day, appearing to be accommodated in the home routine. The activities normally begin around 5am and selling goes on even up to 10pm.

It was observed that cooking for the household continuing in the kitchen, while customers were being served with the brew. Also at the same time some grains were being dried in the sun in the courtyard, as a preparation for use in the making of the local brew. This indicates that the business of brew making and selling takes place along with the other domestic activities, in terms of time and space that is used for the two functions.

For services such as video shows, the timing differs much with the majority of other HBEs. For instance when there is a boxing or a football match show, the owners make sure that they use that opportunity to earn some money from the spectators, even if it would be early in the morning or late in the night. And in some days shows are suspended due to lack of electricity.

Spatial and chronological aspects are both of importance, as Payne (1974), quoted in Kellett (2003) argues that high intensity of use within the confined spaces is possible because the “spatial and chronological symbiotic interaction of activities creates a greater effective space than exists physically.” There are some cases in which HBEs alternate in their use of the domestic spaces, while in some other cases the number of HBEs decreases and increases as the time goes. One respondent who owns a house in the study area observes that tea and bites selling at his home start around 7am and closes around 11am, after which the tea room becomes occupied with video shows up to the midnight. During this rotation the utensils and facilities for the selling of tea and bites are shifted and kept in the main house, then taken out again to the business room before 7am the day after. According to another respondent who also owns a house in the study area, HBEs such as chips selling and *women entrepreneurs* normally do not replace other HBEs in the use of space. Instead the HBEs just add up to the number of enterprises that are already in operation. It was reported that chips selling business in that particular domestic setting starts around 10am and *women entrepreneur’s* starts around 6pm. A similar situation was observed in some few other houses, for instance frying and selling of fish and cassava took place from around 11am.

3.2 Housing Transformation as a Main way of Preparing Spaces for HBEs

Housing transformation refers to an alteration or extension involving construction activity and using materials and technology in use in the locality (Tipple, 1991:4).

Alteration as one form of housing transformation is defined by internal changes of a building, without increasing the total net floor area of the house, whereas extension adds space to the layout of the building. Both alteration and extension have been continuously undertaken in the study area with the aim of preparing or increasing some space for HBEs. Of the 33 houses studied, 23 have been transformed in one way or another, all involving horizontal transformation. To each of the transformed houses, the forms of transformation applied were Extension and enclosure of the veranda, Construction of new rooms to the original house, adjusting partitions for rooms, and replacing temporary structures

3.2.1 Extension and Enclosure of the Veranda

Apart from construction of new rooms for HBEs, it has become common for many households to extend the veranda and enclose it for purposes such as shops and stores. This form of transformation uses comparatively limited additional building materials to adapt the veranda to the new desired use. Some households use this method due to limited funds for new construction and others due to limited space that could allow construction in larger scale locally. The extension could also be used without any enclosure, depending on the nature of the products being sold and temporal nature of the enterprise. But such a situation could mean vulnerability to dust and weather and it could necessitate taking the products in and out for security purposes when closing and opening respectively.



Figure 2.0: A space formerly used as veranda, now extended, enclosed and provided with shade to serve for the multiple HBEs. Note that no more space exists in the plot as development has already reached the road

3.2.2 Construction of New Rooms to the Original House

Construction of new rooms to the original house is a form of housing transformation through which the owner adds new rooms later on to the house built initially. The addition is in a horizontal manner and varies in scale from a house to another, but the purpose is to provide or increase space for accommodating HBEs. The construction of additional rooms for HBEs purposes is taking the advantage that the plot has, in terms of accessibility. To the north the additional rooms face the busiest and the main road of the settlement (Mnyamani Road) which is about 7m wide, and on the eastern side which is the front side of the house, the HBEs face an access path of about 3.5m width, that extends also along the southern boundary of the plot. As such, all the HBEs have direct road accessibility, implying a very strategic location economically. However, the transformation of the house for exploiting the location advantages is associated with its own disadvantages, including overcrowding.

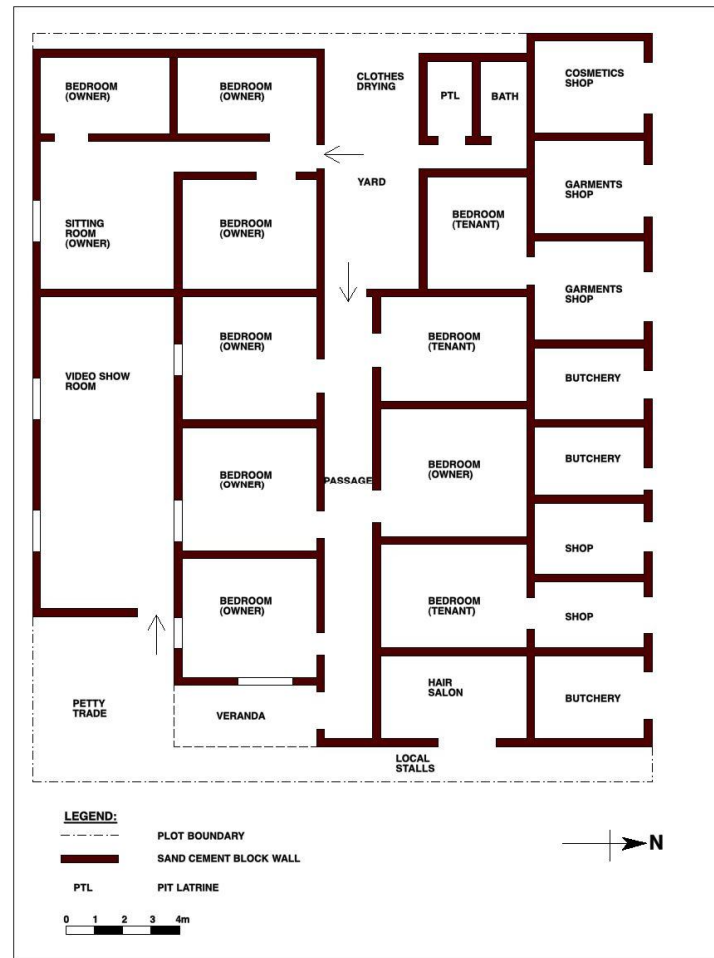


Figure 3.0: Construction of additional rooms to the original house for the purpose of HBEs. Note that the rooms used for video show and shops are additions to the original house

3.2.3 Adjusting Partitions of Rooms

For some households the only way they can have more space is vertical extension, something that is difficult for the majority, due to among other factors, limited financial capacity and the nature/capacity of the existing structure with respect to the need for vertical extension. Therefore this kind of households ends up doing interior transformation so as to adjust the allocation of space among the various uses. In the study area, both demolition of interior walls and construction of partition walls featured as ways interior transformation for HBE purposes. In some cases this transformation involved rooms that were initially not used for HBEs, for instance bedrooms; hence their conversion into spaces for HBEs implies an increase in crowding. In case of a room already in use for business purposes the interior transformation could either increase or decrease the amount of space for the HBEs, while the total amount of space for the house remains fixed.

3.2.4 Replacing the Structures Step by Step

Some houses in the study area were built with building materials such as mud and pole. Owners of these houses have been transforming them by using building materials such as sand-cement blocks, in a form of transformation known as replacement. In this kind of transformation, rooms are replaced step-by-step while the house keeps on being used.

3.3 Spatial Qualities and Environmental Effects Related To HBEs

Most of the shops and butcheries in the study area include an outdoor space with shade for customers, while the indoor space is normally well furnished and enclosed for keeping the commodities during and after business hours. Along with shops and butcheries, HBEs such as tailoring, video show and hair dressing salons claim much space from the domestic setting through housing transformation for the purpose of accommodating these HBEs. The result of this is reduction and densification of the outdoor space, whereby the majority of households either have very limited or completely do not have this resource. Outdoor space is very precious for informal settlements residents particularly the settlements in hot and humid climate like that of Dar es Salaam (Nguluma, 2003).

Some HBEs operate in spaces that apart from being deficient in the requirements related to a particular HBE, they also add to the same problem of outdoor space reduction and limiting the performance of the house for residential accommodation. This is in terms of blocking the light and cross ventilation that is very much required indoors by the house dwellers. Based on the weather condition of Dar es Salaam, health and security reasons, such spaces under HBEs are having limited qualities for the function they perform.

3.3.1 Risks due to the HBEs

Home life is faced with a number of risks related to many HBEs. As the number of customers and facilities for businesses adds to the domestic setting, there emerges risk in terms of health, security and other aspects. For a HBE such as selling of local brew, dangers associated with drunkenness are high, as observed by one seller of local brew in the study area:

Risk is high, because when people get drunk they fight even using bottles or other weapons...Drunkards normally use undisciplined and abusive languages that are dangerous to our children's behaviour (Interview with a lady who owns a house and one HBE)

The use of abusive language was also noted by the customers who interfered the interview at least twice before it ended. For a home to face that situation daily, implies a conflict that tends to make the house look more of a club for alcohol than a home. The selling of the brew is undertaken on the same yard used by the majority of the household members, including children and adults. The household members use the space for resting and talking, especially in the day time due to the hot weather indoors. Some meals are also taken there, as well as washing of clothes and utensils. The space is fenced with a sand-cement blocks wall and provides the only link to the kitchen and to the only pit-latrine for all households in the house and the HBE.

In terms of security, the regular fights of the customers due to drunkenness present risk to the households members, since it is unlikely for the drunken people to be careful with people who are not part of their fights. Based on interview with the house owner, the carelessness also raises the issue of health, as the drunken customers tend to vomit and use the latrine improperly, hence risk the health of the others.

In terms of accidents, some houses are surrounded by surrounded by a number of businesses that hinder its security. For instance a huge collection of timber for sale around the domestic setting endangers the residents, particularly children, whose control of playing implies lack of freedom to them. Furthermore in many times doors and passages of houses are blocked or engaged by these HBEs, something that adds to the risk if fire or any other emergency occurs, as the possibility for escaping becomes very limited. This clearly shows results of unregulated activities in the absence of official control of issues related to health and safety

3.3.2 Nuisance Related to HBEs

Nuisance in this case includes noise, bad smell and dust. Noise associated with the operation of HBEs has happened to be the most outstanding nuisance in the study area. In some cases the noise is accompanied with quarrels or abusive language exchanged between the sellers and customers, but sometimes among sellers or customers themselves, a situation not favoured at the domestic setting. Business enterprises such as motorcycle repair, brews selling, nursery school, charcoal stoves making, video shows, carpentry, saw mills and milling machines are the leading one in nuisance. In some cases children failed to concentrate in studies at home due to noise from sports fans in the video show room.

The business of video shows do not have a specific time, they disturb people who are sleeping and school children when studying. Sometimes request by the victims to reduce noise is respected but sometimes not. Milling machines and saw mills are similar in terms of the noise they produce.

One respondent complained on noise saying:

Milling machines and saw mills make much noise during the day, but at night milling machines continue with the business. During the day the machine serves residents with small deals and throughout the night the machine works for big tenders. So it is noisy all the time (Interview with resident key informant who also owns a house and HBEs)

The situation becomes more difficult when the noise HBE is not owned by the victims, whereas it is sometimes difficult to control or regulate the level of noise. In one nursery school, the space is also used for evening classes. Noise from the nursery school was observed to be very high but no control could be exercised over the noise, given the social character of the HBEs.

In some cases tenants complained about noise that comes from HBEs, although it has been practically very difficult to effect their proposals, as the noise is related to the nature of the enterprises. For instance, tenants in a house that accommodates production of charcoal stoves complained in vain, as no production could be achieved without that noise.

Bad smell has been evident particularly at places where local brews are sold. The smell is basically from the latrines many of which are of poor structural quality. Also where motorcycles are serviced there is a smell of oils and fuels, which are a disturbance to some people. Dust from charcoal is also a common thing in the study area, just like noise. The charcoal dust is accompanied with dust from the roads and paths, all of which are neither gravel nor tarmac, but earth. Operations of charcoal stores and selling in the open, particularly along access roads cause the spread of charcoal dust in the neighbouring paths, houses and other HBEs. Some of these HBEs sell edible commodities, a situation that presents health risks to the consumers due to the dust. When the wind blows, the situation becomes worse, as the dust could also get into people's eyes and houses.

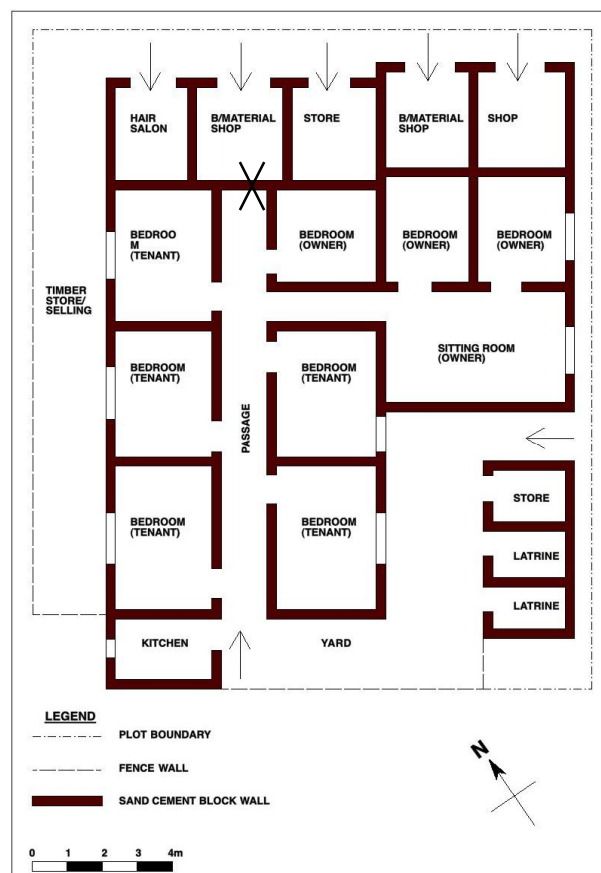


Figure 4.0: Blocking of the front door (marked by X) by provision of building material selling room, top second room from left. The risk is high especially if an accident occurs, as the house is now left with only one main door

3.3.4 Over Crowding

The operation of HBEs in many cases has been occupying a significant portion of spaces that were (or were supposed to be) used to serve for residential purposes alone. The use of corridors and bedrooms by the HBEs reduces free movement of the residents and sometimes presents risks related to the crowding. Cross ventilation which is of a high importance to warm climate settlements like Mnyamani, is also disturbed in the concentration of the business enterprises with the residential requirements. The rooms and other spaces that were initially sufficient for a certain number of households no longer suffice the same number of households due to the HBEs that occupy a significant portion of the spaces.

Transformation has been undertaken on about 70% of the studied cases, for the purpose of preparing spaces that could be used for income generating activities. Despite reaching the purpose, crowding has been a result from the process, whereas many houses are surrounded by HBEs. Worse still, most of the HBEs occupy spaces that were not in the original design of the houses, leading to blocking of windows, hence badly affecting cross ventilation. In one of the studied cases a total of ten rooms for HBEs were added to the original house, making the plot coverage reach about 95% as opposed to 61% before the transformation. As a result, four rooms of the main house remained without even a single window, and two other rooms had windows opening into a video show room. Again, some of the HBEs also used spaces such as the corridor, the veranda, as well as the remaining open area adjacent to the road. Such a crowding and unhealthy situation for the sake of income generation could be probably avoided by having a design that includes future possible development.

There was also an observation of a number of items that are related to business enterprises in spaces that are also needed and used for domestic purposes. In two houses commodities and facilities related to shops were observed using the corridor, hence causing crowding that risked safety of the other users. In another case repair and service of motorcycles was observed to use the backyard for storage of spare parts, a space that also functions as place to dry clothes and kitchen for the household. The same HBEs was observed to use the corridor for keeping motorcycles that await services or the owners to collect them, apart from using the open area adjacent the path for the services.



Figures 5.0 and 6.0: Crowding in the backyard and the corridor respectively. Motorcycle spare parts stored in the yard and a motorcycle kept on the corridor. The overcrowded yard is also used for cooking purposes (see utensils on the floor) and the corridor for resting and a passage to other functions



Figures 7.0 and 8.0: Crowding Presents Risk to Children and Adults too. Crates of Drinks and Bags of Maize flour from Shops in two Different Houses have been kept on the Corridors, thus Squeezing the Spaces

3.4 Potentials of the Double Functioning

3.4.1 Closeness to Customers and Services

HBEs basically get customers from within the houses in which they are undertaken and the surrounding houses. However other customers come from outside the study area as workers in some of the HBEs such as saw mills, carpentry and milling machines. Given the demand of the kinds of products from the HBEs, there is almost an ensured continuous market for which to compete. Related to this factor of closeness are benefits such as money saving; time saving and convenience, and symbiosis in the phenomenon and optimal use of the house.

3.4.2 Enhancement of Security

Although some respondents argued that undertaking income generating activities at home ruins the state of security at home, other respondents maintained that security is enhanced through the co-existence. In this context security refers to safety and protection of the HBEs and the residents in a particular house. Opening up relationships and friendships in the buying and selling is said to minimise the possibility for theft.

Related to the above observation, some owners of HBEs and some house owners who do not own HBEs say that the almost full time presence of people (basically customers and owners) for the businesses at home tends to enhance security. Enhancement of security is also brought about through arrangement of some owners of HBEs who collectively hire a watchman to guard the business properties at night. As the business properties are in the same houses that are guarded, the residents also benefit from the security service.

3.4.3 Household Participation and Supervision

Undertaking income generating activities at home is argued to present a better chance for more direct participation of more members of a household that undertake the income generating activities. This is in terms of supervision, taking part in the business activities as well as directly benefiting from what a particular HBE does. One respondent commented on this potential saying:

One very important aspect of these home based income generating activities is the possibility of rotation among the family members. I can be working here now but after some hours my wife can replace me whenever a need arises (Interview with a house owner who also owns three HBEs).

Owing to the limited financial resources to the majority of the residents, certainly it would be very difficult to the household to hire somebody else to be rotating with the main worker of the enterprise. But because the enterprise is home-based, the household becomes free to use any of its available members in the rotation.

However, this freedom is limited on the basis of the kind of capacity or skills required of the household members to replace one another in the enterprise. With the income generating activities undertaken at home, members of the households almost automatically take part in supervision role, since the businesses situate within the home. This was observed in a number of the studied cases whereas the members of the household (other than the main actor) took interest to see what was happening to their business and if there was anybody in need of buying the products/services.

4.0 Conclusion and Recommendations

4.1 Conclusion

The use of space in residential premises for home based enterprises, for income generating purposes has become very important for livelihoods of many poor households in the studied settlement. Existence of the conflicts associated with the double-functioning of residential premises could therefore be regarded as a transition towards improved performance. To be taken into consideration however, along with the conflicts is the issue of space requirement resulting from the double-functioning and its implication to future planning. Unless the planning system is efficient enough to affect a compact settlement pattern, the double-functioning of dwellings is likely to increase the urban sprawl.

4.2 Recommendations

The double functioning of the domestic space for residential and income generating purposes in Buguruni Mnyamani is associated with both benefits and problems. This paper considers the double-functioning as an important way through which the low-income households can earn their living as a livelihood strategy. It is therefore worth stating that HBEs are very important undertakings in informal settlements and they should be encouraged instead of being neglected by the government. The government should support the initiatives in a positive manner as a way of promoting economic and social well being of the majority of urban dwellers who lives in informal settlements like that of Buguruni Mnyamani. However based on the current performance of the phenomenon, some recommendations are given below as a contribution for improving the situation spatially, economically as well as socially.

4.2.1 Speed-up Settlements Upgrading

The need to speed up the upgrading of informal settlements is based on the reality that the current conflicts related to the phenomenon are likely to increase pressure on the limited services and the environment as the time goes. It is also unlikely that the phenomenon will soon cease. It is understood that the government of Tanzania adopted upgrading as a strategy to improve informal settlements in the country from the 1970s. However the upgrading schemes that dominated the 1970s and early 1980s have been abandoned in the 1990s (Lupala, 2002), though settlements upgrading was among the nine issues in the Dar es Salaam City Consultation of 1992 under the Sustainable Dar es Salaam Programme (Nnkya, 2004). Starting from the early 1990s the participatory approaches by the local authorities in Dar es Salaam seem to be far from addressing the pace to which the informal settlements are growing and consolidating (Lupala, 2002). The pressure associated with the changing economic orientation requires a speedy upgrading of the settlements so as to contain the spatial, social and economic pressures in the informal settlements. Ghafur (2001) also insists the importance of service improvement in informal settlements that, improvement is highly influential in determining HBE performance.

4.2.2 Settlement Regularisation

Being an informal area, the operations of the income generating activities in the settlement are having almost no control of the formal regulatory system. Although lack of control to some extent is due to inefficiencies in the local authorities, it is also due to inapplicability of some of the regulations and rules that are used in the formal areas. With regularisation some more rules and regulations can be applied, though still it will depend on the efficiency of the planning mechanisms in the local authorities and their efficiency to make a difference with the current situation. Such rules may include the ones that are concerned with improvement of the environmental situation.

Plot Sizes to Accommodate the Double-Functioning

At present the minimum standard of plot size in Tanzania is 288m², as adopted by the Sites and Services project of the 1970s, although there have been some recommendations to reduce the plot sizes on the basis of experience from other countries (Lupala, 2002).

In Buguruni Mnyamani 11 of the 33 studied cases have plots with sizes equal to and above the said minimum plot size . However, there have also been different views in relation to sufficiency of the plots. Therefore it is recommended here that plot standards should consider accommodating shelter and income generating purposes in the domestic setting, as they are likely to be dominant in many residential areas, particularly the low income areas.

4.2.3 Enabling Mechanisms for Housing Improvement

Although the government is no longer taking the provider role, it is still important for it to develop some enabling mechanism so that residents may have housing that can accommodate the two functions with minimum negative effects and instead to maximise effectively its benefit for the poor in informal settlements

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