

Effects of Massive Settlement Demolition in Dar es Salaam Region along Morogoro Road from Kimara Stopover to Kibamba, Ubungo District

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Abstract

This article focuses on effects of settlement demolition in Ubungo District, Dar es Salaam City in the United Republic of Tanzania. Specifically this paper tries to answer three objectives: (i) explore causes and reasons for settlement demolition; (ii) determine socio-economic effects of settlement demolition; (iii) examine measures to address effects of settlement demolition. The study was conducted in the area along Morogoro Road where recent demolition has been executed. In this study data was collected using questionnaires, interviews and direct observations. A total of 200 people mainly head of the households were sampled for this study. The major findings of this study were loss of security due to demolition of houses as most citizens turned to homeless; loss of properties, loss jobs and loss of income among others. Despite these negative effects, the positive effects of the demolition are provision of good infrastructure, establishment of new settlements and high demand of building equipments. All in all, demolition aimed at bringing development and improves people life. The demolition exercise has a number of challenges such as people refusing to abandon their areas, people coming back to the demolished areas, thieves and crimes emerges, to mention some. Recommendations, people should be sensitized on following regulations so as to avoid problems, adhere to laws, regulations and by-laws.

Keywords: Demolition, dismantling, settlement, Kimara, Kibamba

Introduction

Shelter is one of the basic human needs (Murray *et al.*, 2005; Penz, 1991). Other basic human needs without which there is no life are food, clothes and water. House protects properties and human against enemies, wild animals, bad weather and other calamities. Dismantling of the settlement means denying human beings with one of the basic needs (Gasper, 2005; Goldewijk & Fortman, 1999; Hamilton, 2003).

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Rathi and Khandwe (2014) defined demolition as the process of destroying down, dismantling or collapsing down large buildings after its useful life period. In other words, demolition is the tearing down of the building and other man-made structures (Rathi and Khandwe, 2014; Foruzesh, 2016). It is a process of removing unwanted buildings where they are (Foruzesh, 2016). Demolition included knocking down house, removing debris and covering the site with dirty or gravel. The building is pulled down either manually or mechanically using large hydraulic equipment; elevated work platform cranes, excavators or bulldozers (Ingvarsson and Eriksson, 1988; Lindseil, 1995). The demolition of settlement or buildings can be done intentionally or unintentionally. Why unintentionally? It is unintentionally if it is done to pave a way to other activities or development (Mahenge, 2007). People whose houses were demolished had built their properties in a wrong places like open space, that is why the government had to demolish them in order to expand its road services. Demolition is done intentionally, if someone demolishes the old structure to build a new one. It may also be that someone wants to change the uses or type of the old buildings.

Why this article? The rationale for this article is that since the demolition started in Dar es Salaam city, no specific study has been done to document the effects of settlement demolition to human beings and to the environment. This is the reason why this study is conducted. Specifically, this paper tries to answer three objectives: (i) Exploring reasons engineering settlement demolition in the city; (ii) determine socio-economic effects of the settlement demolition; (iii) examine measures to address effects of settlement demolition.

Causes of Settlement Demolition

Settlement is a colony of people including dwellings, other buildings and ways (Thomas, 1967). Demolition is an act of destructing or demolishing building (Rathi and Khandwe, 2014). The literature identified number of the causes of settlement demolition. Demolition can be done intentionally or forcefully (Bhandari, 2013). It is intentional when people willingly agree to dismantle or demolish their building(s) or houses. It is forceful when houses are demolished by law, by order or by police. If the houses are built in prohibited or restricted areas or in areas vulnerable to floods, they may be demolished with or without notice. There are different reasons necessitating demolition of houses such as (i) When the building is too old and cannot be put to further use (ii) Structural changes (iii) Development of the city (iii) Structural failure of the building and (iv) expansions.

Material and Methods

Dar es Salaam City is one of the regions in the United Republic of Tanzania. The region is composed of five districts, namely; Ilala, Kinondoni, Temeke, Kigamboni and Ubungo. This study was conducted in Ubungo District. The study district was selected because it is one of the districts where demolition of settlement was done recently to pave way for road expansion. Specifically the study was conducted along Morogoro Road from Kimara Stop-Over to Kibamba Ward. A sample of 200 people regardless of age, sex, education level and occupation were selected. The data were collected using questionnaires, interviews, direct observations and documentary literature review. The sample of this study included people who were affected by the demolition process. Men, women, youth and children were involved in this study. The quantitative data collected were analyzed using SPSS software while the qualitative data were analyzed using content analysis.

Results

This section presents the major findings of this article. It specifically focuses on the reasons engineering demolition of settlements, effects of demolitions and measures taken to lessen the effects of settlement demolitions.

Causes of demolition

Demolition is a result of many reasons (Table 1). The reasons for demolition can be grouped into two; voluntary and involuntary/forced demolition. Voluntary demolition involves people demolishing their houses for number of reasons such as to build a new house, change structure or style, selling a land and change uses of the land/area. Involuntary or forced demolition is the second group. This type of demolition is done by force or by laws. Some buildings are demolished to pave the way to other activities or other buildings. Some buildings or house built in wrong places like in flood areas, in road reserves, in the national parks, in open spaces and in protected areas like in forests and water catchment area are demolished to pave the way to the uses which is not dangerous to the environment. Demand for or built of new structure and standard cities in any county forced demolition are to be executed, mainly for unplanned settlements.

Table 1: Causes for demolition (n = 200)

Reasons for settlement demolition	Frequencies	Percentages
Expansion and development of the city	71	35.5
Poor planning of urban settlements	61	30.5
Poverty forced people to built in prohibited or marginal areas	55	27.5
Building in area vulnerable to floods	53	26.5
Need more land or area for town/ urban expansion	47	23.5
Change uses of area designated for settlement to other uses	34	17.0
Build on others land (caused by bribe and corruption)	27	13.5
Houses built without permit, not adhering to urban master plan	25	12.5
Build in areas designated as open spaces	17	8.5
When the building is too old and cannot be put into further use	11	6.0
Structural changes such change of style, fashion or taste	9	4.5

Different factors were mentioned by people interviewed as causes of demolition (Table 1 and Box 1). About 35.5% of the respondents (as shown in Table 1) were of the view that, the main reason for the demolition of settlement was due to expansion of urban infrastructure (roads, railways, airport and harbor) and development of the city. However, 30.5% of the respondents said that, poor planning of urban settlements is another reason influencing demolition in urban areas to pave the way to other socio-economic development. The authority responsible for urban planning is not doing its work timely and proactively. People need to be guided and educated on where to build their settlements and where not to build. Need more land and more area for town and urban expansion was next reason for settlement demolition as said by 23.5% of the people interviewed.

Box 1: Buying land without contacting the responsible authority

The first person interviewed had this to say:

House is a life, is one of the basic needs. Demolition of our house is denying peoples' right to live. I bought this land in 2005. I did not know that, this was a road reserve and owner was paid sometimes in the past. I don't know what to do or where to go.

The second person interviewed had this to say:

I am a pastor; I started serving this church two years ago (name withheld). I had no idea that, my church would be demolished. But looking on the document I found that, this place was bought from someone (name withheld). I am not sure if he was paid or not and I don't know where to get him.

The third person interviewed had this to say:

I am a business man. This demolition left me with a lot of unanswered questions. I have good number of customers who I am not sure if I will get the same in the new area I am expecting to go. Building goodwill with customers takes time. This demolition has dragged me back.

Houses built without permit or not adhering to urban master plan was another reason for settlement demolition. This point was supported by 12.5% of people interviewed (Table 1). Building in areas designated as open spaces is another serious problem in urban areas (Box 2). Open spaces include playing grounds, government land, schools compounds and others. About 8.5% of the respondents supported the argument that, settlement established in open spaces have to be demolished to provide room for the intended needs or uses. These settlements have been established without permissions and without adhering to master plan; all these denied the rights of people to use open spaces.

Box 2: Open space in urban areas

"Open space is a common land, is a public area and it is not individual land", said one of the Street Chairman interviewed. People have bought land in open spaces without known. This has cost many people, as the land they bought has been confiscated by the government and returns them to the owner or to the intended use. Before buying a land, people need to consult the responsible authority like village office, street office, and offices responsible with land.

Build on others land is another cause of settlement demolition as supported by 13.5% of the people interviewed. However, if it is found without doubt by the law or by the court that, the appropriator of the land got it not in the defined procedure; the settlement may be ruled to be demolished or returned to the owner of the land. This may be the result of giving bribe and corruption to

snatch others land. Establish or build settlement in area vulnerable to floods is a problem as supported by 26.5% of the people interviewed. Getting land for settlement in Dar es Salaam is very expensive. The alternatives or option adopted by many people is to build in areas susceptible to floods; as most of these areas are not expensive. Also people are buying land during the dry seasons which is very difficult to know the nature of the land. During the rain time is only the time you can know which area is susceptible to floods or not. The buyer of the land need to solicit information from the people residing close to the land you want to buy because they (residents) know the nature of the area (Box 3).

Box 3: Why buying land during rain seasons

Some people have become victim of floods. Sometimes people become tempted to purchase land in a flood plains because, the flood plains are flat, and the area does not need leveling. The buyer thinks that, the flat land is less cost and easy to build the house. Since it is difficult to know the area is susceptible to floods or not, rain season is the time to buy land. The seller sells their land after rain seasons as it is difficult to notice the flood or water logged area.

Change uses of area designated for settlement to other uses is another reason for houses demolition. About 17% of the respondents support this argument. Master plan shows what is to be done where. Urban master plan states areas for settlements, for industries, open spaces (play grounds, gardens, road reserves etc.) and others. However, if the designated uses of land are diverted to other uses which is not blessed by the responsible authority can lead to demolition of settlements or buildings. However, 27.5% of the respondents stated that, poverty forced people to build in prohibited or marginal areas. Most of these areas are flooded areas, steep slope areas, common areas (pubic owned areas) and protected areas, to list some. The effects or the results of building in these areas is demolition; enforced the responsible authority to demolish any structure build in these areas. Areas like Jangwani in Dar es Salaam have been suffering from floods frequently.

When the building is too old and cannot be put into further use can be demolished leading to building of a new structure. This argument was supported by 6% of the respondents. Some houses were build long time ago, during the colonial time, since they have been in existence for so long, their life span has expired. This situation forced demolition of the buildings before causing disasters such as death and loss of properties. Mud houses cannot last long, due to termites and exotic species poles which can not last long. The old man

interviewed in Kibamba CCM had this to say, “A good built mud house cannot last for more than four years; need to re-built new one after every four years. The problem with mud houses is this; trees used in building are not hard, we are using exotic species which are not termite resistance because natural species are no longer available”. Fashion and income sometimes influenced structural changes of buildings. 4.5% of the people interviewed mentioned that fashion influenced people to demolish their houses and build new one. On the same note, if income improved people may be influenced to demolish the old or small house in order to build or erect a new house (Box 4).

Box 4: Income influence changes

A man interviewed said this, “5 years ago, I was living in small house with three bedrooms. This year in January I demolished it and built a self contained house after getting good employment in one of the government office in Dar es Salaam. The new house has master room, three bed rooms, kitchen, sitting room and store”.

Effects of settlement demolitions

There are various effects of demolition of buildings in the study area (Table 2). The first effect was the loss of properties like house, home utensils, accessories and others. People interrogated commented that, “*demolition of houses leads to loss of settlements*”. Demolition can increase homeless people if not done with care; demolition causes loss of security for affected citizens as said by 23.5% of the respondents. Demolition can increase or leads to crime, thieves and robbery. Loss of jobs and loss of employment is another effect of demolition as said by 26.7% of the respondents. With demolition, people lose activities giving them wages or salaries. Demolition can further increase unemployment and dependence rate can increase. The man interviewed in Kimara Ward said this, “*I was employed by Imani Health Center as Laboratory technician; I lost my work after the Imani Health Center was demolished*”. Another woman interviewed had this to say, “*I was working with Mombeye Night Club as Accountant, the demolition of the club leave me without work as the club was in the road reserve*”.

Table 2: Negative effects of settlement demolitions

Effects	Frequencies	Percentages
Loss of properties like houses, furniture and home utensils	83	41.5
Loss of security for affected citizens (increase of or leads to thieves, crime and robbery)	47	23.5
Loss of jobs and employment (wages and salaries) i.e. unemployment can increase	53	26.7
Economic disturbance due to loss of income generating premises/ activities in the affected are	41	20.5
Socio-cultural effects due to dislocation of society/ people	39	19.5
Government incurs high expenditure on compensation of people and operation of demolition	41	20.5
Loss of life due to stress	23	11.5
Loss of friends and relatives	47	23.5
Increasing poverty to those who their houses have been demolished (Dropping from rich to poverty, lost their income generating activities))	78	39.0
Pupils and students did not go to schools	55	27.5
Incur unexpected costs like renting house and establishing new settlements (Increase expenses)	17	8.5
Others: i. Increase of street children (long term effect) and child labor (ii) Eruption of diseases	23	11.5

About 41.5% of the respondents indicated loss of properties such as houses, furniture and home utensils as a major problem associated with demolitions (Table 2). In most cases demolition is not selective, it damage whatever is within the demolition machine. Box 5 present the case of one woman interviewed who lost her house.

Box 5: Effect of demolition on house

The woman interviewed lamented that, “*demolition of my house pained me very much. I built this house more than ten years, my house was turned to dust in a few minutes; it was very pain. Apart from demolition of my house I lost other things like money, fridge was damaged, television, radio, clothes, documents and many other things*”.

Security of human being and his properties is very important, Demolition remove this security because people will have no-where to sleep, no-where to keep his/her properties or do anything. About 23.5% of the respondents mentioned that, demolition leads to loss of security to the citizens; it increased or produces thieves, crime and robbery (Box 6). This is so because people will be snatched their home and activities to enable them get their daily bread.

Box 6: Demolition and security

Demolition is operation, it is not selective. Demolition demolishes everything including shops, markets, restaurants and other income generation activities. All these leave people with nothing to do to get income or livelihoods. Alternatively, youth are indulging in gambling, robbery, thieves and crime. All these are illegal activities which destroy security.

Poverty is the results of many factors including lack of shelter. Demolition of settlement can increase poverty to those who their houses have been demolished. People will be unsettled and will not seriously engage in socio-economic activities. 39% of the people interviewed supported the argument that, demolition contributes to poverty. With demolition, rich or better off people may turn to poverty because of losing income generating activities. Poverty is when people are unable to get the required food, have shelter and live with less than 1\$.

As presented in previous sections, some houses were supposed to be demolished not because they were built in wrong places, but to give room for other socio-economic development like schools, expansion of roads or railways and others. All the houses demolished in this nature were compensated. About 20.5% of the respondents commented that, government incurs high expenditure on compensation of people and sometimes the government is supposed to pay the operation/ charges of demolition. For example, the demolition of TANESCO building at Ubungu, the cost was carried out by the government.

The residents of the houses demolished involved children going to schools. With demolitions, pupils and students did not go to schools. After demolitions some families moved to different areas to reside. Some of the area where people get settlement is very far from the area they used to live. These areas were very far from the area where the children were studying. 27.5% of the residents interviewed lamented that, their children stopped going to school because they were supposed to go and live very far from where their children were studying. This situation took sometimes, before families settle and their children start schooling in the new settlement.

In most cases, demolition is unexpected exercise. You cannot plan when demolition will be executed. It is simple to demolish than building a house. It is cost and takes many years to complete building a house. Once the house is completed you forget the time and cost you have incurred. When the same house in demolished, is where the people incur unexpected costs like renting house and establishing new settlements. This situation increase unexpected expenses and sometime forced people to sacrifice some other activities. This argument of incurring unexpected cost was supported by 8.5% of the people interviewed. However, about 11.5% of the respondents mentioned factors denoted as others. "Others" comprises (i) increase of street children (long term effect) and child labor (ii) eruption of diseases as people will reside in areas without necessity needs like toilets and safe water.

Importance of settlement demolition

Demolition of settlement is influenced by number of reasons as presented in previous section (Table 1). Some urban Master Plans have been made many years ago. At that time population was very low, roads were very thin, small and few; settlement were few built close to the road and there was no shortage of space. With population increase, urbanization and improved development, demolition becomes inevitable.

What are the importances of demolition? About 48.5% of the respondents mentioned the positive effect of demolition as, paving way for the improvement and expansion of infrastructures such as roads, railways, shopping malls and many others (Table, 3). Provision of new and improved settlements for citizens, new villages, new town and urban emerges is another benefit accrued from settlement demolition as supported by 31.5% of the people interviewed. Provision of new jobs/ new activities for citizens like food vendors, petty trades and transporters was mentioned by 17.5% of the people interviewed.

About 23.5% of the 200 respondents stated employment opportunities as another contribution of settlement demolition due to the development of new projects or buildings in the areas where houses have been demolished. Since the demolition of houses along Morogoro Road from Kimara to Chalinze is for the expansion of its road, this project will control and reduce traffic jam in the Morogoro Road. This reason was mentioned by 34.5% of the respondents. Control of floods was another expected benefits of demolition since water will flow on its way. Drainage system will be improved which will allow smooth flow of water. One of the causes of floods is haphazardly building which blocks the drainage system of water. Demolition as said by 10.5% of the people interviewed; will influence people to build houses following Master Plan and the given design. "Others" in Table 3 represent other positive effects of settlement demolition which among other were (i) promoting discipline in establishment of settlement (ii) enhanced settlement planning (iii) beautify urban environment and others (Table 3).

Table 3: Positive effects of settlement demolitions

Importance of settlement demolition	Frequencies	Percentages
Improvement and provision of good infrastructures (expansion of roads, railway, weighing bridges, shopping malls and different buildings)	97	48.5
Provision of new and improved settlements for citizens, new villages, new towns and urban emerges	63	31.5
Provision of new jobs/ activities for citizens like food vendors, petty trades, transporters and others	35	17.5
Employment opportunities due to new projects developed in the area demolished	47	23.5
Control and reduce traffic jam in urban areas	69	34.5
Control of floods since water will flow in its way	21	10.5
Helps in the proper land use planning in cities and urban areas	17	8.5
Beautify urban environment as things will be in a proper place and in order	11	5.5
Others	9	4.5

Discussion of Results

The general results of this study indicate that, all people interviewed were aware of both negative effects of demolition and its importance. Various researchers have explored causes of demolition of houses, needs of demolition and importance of demolition (Mignon and Bréquel 2017; Muthu *et al.*, 2017; Rathi and Khandve, 2014). The literature reviewed indicated that, there are few studies that have been conducted in less developed countries focusing on demolition, Tanzania inclusive. However, in the available studies from developed and developing countries it has been proved that there is a positive and negative effects of demolitions. According to Mignon and Bréquel (2017), the proper execution of demolition must follow certain steps such as preparation, decontamination, dismantling and demolition. Adhering to these steps will reduce the effects or problems associated with demolition exercise. In order to improve the safety management during demolition, the right method for demolition should be chosen based on various determining factors such as providing safety for the workers and the adjacent structures, ensuring the removal of debris and reducing the impact on environment (Muthu *et al.*, 2017; Husain, and Assas, 2013).

According to the first President of the United Republic of Tanzania, Mwalimu Julius Kambarage Nyerere, there are three enemies of development, namely poverty, ignorance and illiteracy. With this say, people can build their houses in a flood area because of poverty or ignorance. People, who are illiterate of law and regulations, may build in area not recommended for settlement as a result these houses may be demolished to avoid death and loss of properties. Demolition leaves people homeless and poor. There are different views regarding the life span of buildings. According to Rathi and Khandve (2014), every structure is designed for a specific life period, generally 100 years. Demolition is the process of destroying, dismantling or collapsing down of buildings after its useful life period (Rathi and Khandve, 2014). The existence of the structure after the service life period is over is very dangerous to its occupants and surrounding buildings. Thus, houses at this situation are recommended for demolition. According to Baker *et al.* (2017), there are many reasons as to why people chose to demolish or adapt existing buildings. In other grounds, demolition can be done to give rooms for other activities like expansions of roads, airport, harbor and the like.

Conclusion

It is concluded that any demolition has a way to control or counter next demolition. People should adhere to regulations; comply with laws and policies

to avoid demolition to reoccur. They should not build without permit and before building they should check their plot in the Master Plan to know whether the plot is in areas recommended or planned for other activities. In some instances, demolition is inevitable. If it happens that demolition is a must, precaution measures must be taken. Before carrying out any demolition work, building survey must be done carefully, so that it may not cause any severe damage to the environment, to the public and to the properties around the building which is to be demolished. Procedures of demolition should be carried out with the aim of minimizing the risks which could cause damage to persons and to properties of the people; endangering health and safety of site or personnel and damaging the neighborhood environment.

With this conclusion, the following recommendations are provided:

- i. People should consult responsible authorities before buying a plot for establishing settlements.
- ii. People should acquire a permit (title deed) of the land and building permit before starting building the house.
- iii. Before demolition people must be given a notice of demolition and enough time before the exercise of demolition is executed.
- iv. Compensation should be given to people whose houses have been demolished to give room for socio-economic development such roads, railways, harbors, schools, health centers and airport, to mention some.

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