



ASSESSMENT OF THE LIVELIHOODS ASSETS ON THE FLOOD INDUCED  
RESETTLEMENT: THE CASE OF JANGWANI INFORMAL SETTLEMENT IN  
DAR ES SALAAM-TANZANIA

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**Abstract**

The study assess the influence of the livelihood assets on the resettlement compliance by Jangwani residents. The study motivated by the Government decision to resettle people from Jangwani to Mabwepande, in response to 2011 floods. The study was guided by livelihood assets which include; Social capital, Natural capital, Human capital, Financial capital and Physical capital.

The research methodology involved random selection of 99 respondents based on the Slovin's formula indicated in Israel, (1992). Questionnaires, observations, interviews and documentary review used for data collection. Moreover, the collected data were analysed using SPSS version 25. The findings shows more than 50% of the residents return back to Jangwani for the following reasons: 87.6% presence of relatives and friends; 52.6% being member to community savings; 66% presence of business activities; 53.6% family size; and 53.6% fear of losing land near city centre.

Additionally, easy access to housing where 53.6% own house, 21.6% rent at reasonable cost was also indicated; 97.3% indicated Presence of infrastructure and transportation options; 94.8% indicated availability of services such as food stores; 52.5% indicated proximity to schools; and 55.7% indicated presence close to working places. To this end the study recommends; the availability of social-economic aspects in the resettled area.

**Keywords:** Resettlement, Livelihoods; Livelihood assets, Urban planning, Informal settlement, Floods and Jangwani

## 1.0 INTRODUCTION

Urbanisation trends in many of the poor countries including Tanzania have been taking place under the poverty and growth of informal settlements (Lupala, 2002). It is estimated that 72 percent of the African's urban population living in informal settlements (UN, 2011). The proportion is 43 percent in for Asia and Pacific, 32 percent for Latin America and 30 percent for the Middle East and Northern Africa (Cohen, 2006).

In Dar es Salaam, it is estimated that 70-80 percent of residents live in unplanned settlements (UN-HABITAT, 2008). The number of unplanned settlement in the city has increased from 15 in 1980s to 105 by 2003 (Omar, 2019). However, The lack of formal engineering criteria in the construction of informal settlements together with their generally poor construction quality renders them particularly vulnerable to extreme natural phenomena including flooding (De Risi, 2013).

Tanzania is one among the African countries that have adopted the system of resettling people who reside in flood areas such as Jangwani area and move them into a new safe areas. The Jangwani area was declared by the former Minister for Lands and Human Settlement Development that, not fit for habitation because of its vulnerability to environment threats especially flooding (Casmiri, 2009).

In 2011, the Government took an initiative to resettle people residing at Jangwani area after experiencing severe floods (risk area) to Mabwepande area, which is less exposed to floods. However, various authors have cited some factors that affect resettlement. Those factors are related to livelihood assets such as financial, social, human, natural, and physical capitals (Sharad, et al., 2018); and risk paradoxes which include floods experience/benefits, trust in authorities and the individual ability for preparedness (Wachinger, Renn, et al., 2013).

Therefore, it is the interest of this study to assess the influence of the livelihood assets factor on the flood induced resettlement of Jangwani residents.

### **Research objectives**

The objective of this study is to examine the manner in which the livelihood assets affect the resettlement of Jangwani residents to Mabwepande.

## 2.0 LITERATURE REVIEW

### **2.1 Resettlement, Planning and Implementation**

*Resettlement* refers to “a situation in which provision is made for people who have to move.” It is characterized by resources compensation whereby people can either resettle to a new place or find another place for themselves with money received for compensation (Oliver-Smith, 2009). However, a choice to stay in those risk areas have been attributed to easy access to physical,

social, natural, human and financial livelihood assets. According to Cernea and McDowell (2000), the IRR (Impoverishment Risks and Reconstruction) Model for Resettling Displaced Populations identify the key impoverishment and risk in the resettlement process which includes: Landlessness, Increased morbidity, Joblessness, Food insecurity, Homelessness, Loss of access to common property resources, Marginalization and Community disarticulation

The model also explains that the livelihood of those displaced should have the strategies such as: “From social disarticulation to community reconstruction, from joblessness to re-employment from increased morbidity to better health care, from expropriation to restoration of community assets, from homelessness to house reconstruction, from landlessness to land-based reestablishment, From marginalization to social inclusion and from food insecurity to adequate nutrition”(Cernea and McDowell, 2000, p.20).

Moreover, Scudder, (2009) argues that successful resettlement should ensure initiation of economic activities that guarantee improvement of standard of. Again, Viratkapan and Perera(2006) have indicated community/membership participation in decision making for the new place; leadership strengthening; and community unity; and availability of basic services such as local markets/sub-centre, proximity or availability of roads and compensation consideration as among the factors influencing successful resettlement.

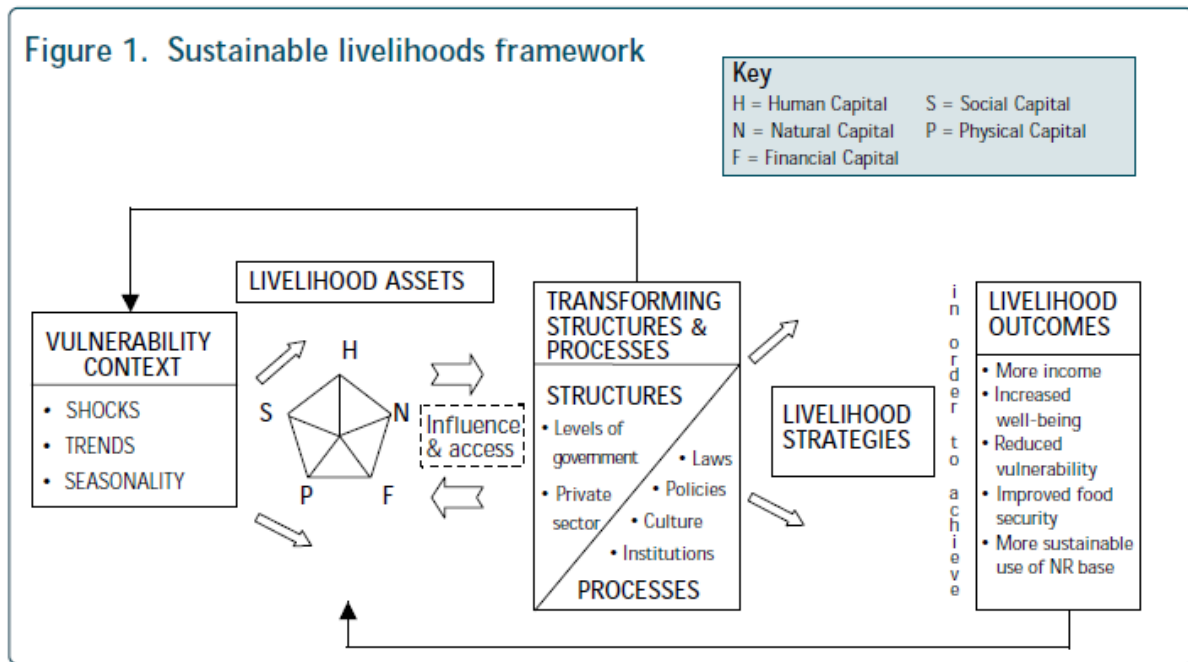
## **2.2 Theoretical Framework**

### **2.2.1 Livelihoods approach**

According to Arce (2003), the theory of livelihood is not only limited to income generation but also entails the social welfare of people. It is therefore essential to put into context the social well-being of people into the concept of sustainable livelihood while assessing the resettlement processes.

Also, according to Farrington et al. (1999), sustainable livelihood approaches should include a central focus on people and a holistic approach. The central focus on people entails pro-poor strategies that include analyzing the dynamics of livelihoods, and rendering support and their impact on resettlement.

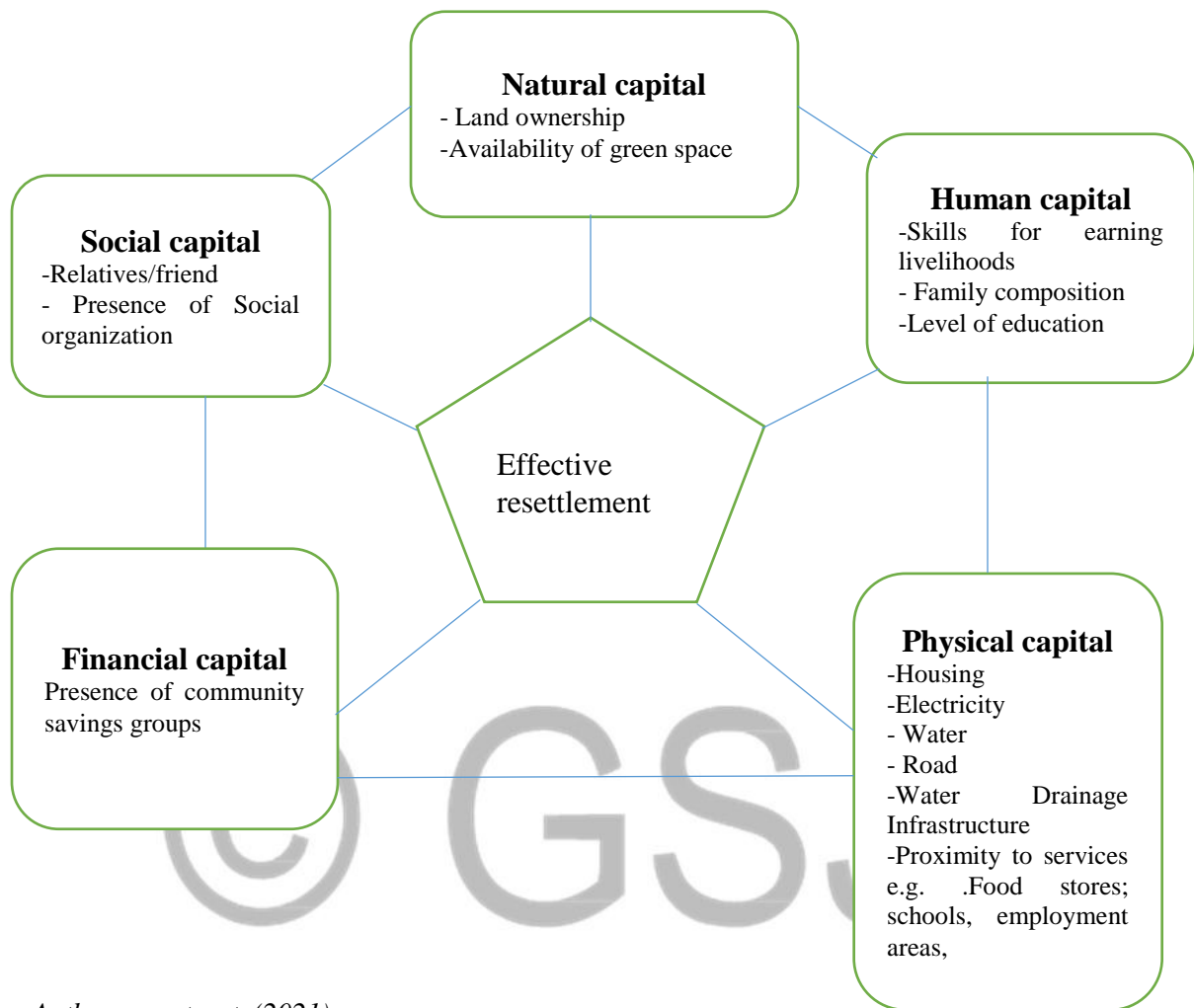
The DFID's Sustainable livelihood framework (Figure 1) is one of framework developed to analyse the complexity of livelihood sustainability. The framework assumes that people pursue a range of livelihood outcomes (health, income, reduced vulnerability, etc.) by drawing on a range of assets to pursue a variety of activities (Omar, 2018).



*Source: DfID, 1999*

From Figure 1 there are five types of assets pictured as corners of a pentagon, which is meant to emphasize their interrelatedness. The five assets are human, social, physical, natural and financial. These can also be referred to as human capital, social capital, and so on. Usually the explanation started with human capital, i.e., first and foremost labour but also skills, experience, knowledge and creativity. Then followed: Natural capital, i.e., resources such as land, water, forests and pastures, but also minerals; physical capital, i.e., houses, tools and machinery, food stocks or livestock, jewellery and farm equipment; financial capital, i.e., money in a savings account or in an old sock, a loan or credit; and finally social capital, which pointed at the quality of relations among people, for example, whether one can count on support from one's family or (mutual) assistance from neighbours. Natural capital was considered very important in rural areas, while in urban areas it was considered less relevant as compared to shelter and wage labour. Moreover, in urban livelihood studies, basic infrastructure like transport, water and energy was mostly included in physical capital together with shelter and production equipment (de Haan 2000, 344).

**Figure 2: Conceptual framework- Influence of Livelihood Assets on Resettlement**



*Source: Authors construct, (2021)*

### 2.2.2 Description of variables

This section focused on the presentation of the variables or indicators and how they are defined specifically for the purposes of this research which is whether access to livelihoods assets motivate people to stay at the original settlement (Jangwani).

#### ***Livelihood assets:***

Factors for livelihood assets consists of human capital, social capital, financial capital, physical capital and natural capital.

*Human capital.* Is the livelihood assets that represent the ability for labour, knowledge, good health and skills that help people to achieve their livelihood objectives and pursue a variety of livelihood strategies in Jangwani. For this research, analysing human capital in Jangwani, means also to understand whether those who are refusing to resettle are doing so because they perceive

that moving to Mabwepande would reduce their opportunity to access jobs, skills, education and so on.

*Social capital:* This assets represent connectedness, networks, and membership such as group formalized relationships of reciprocity, trust, and exchanges which influence cooperation in Jangwani.

*Financial capital.*refers to financial resource used by persons to achieve the objective of their livelihood. It comprises stocks and flows. It also contributes to the production and consumption. This capital also rely on credit, pension, remittances and liquid assets (livestock and jewellery) in Jangwani.

*Natural capital.*Refers to the “natural resource stocks from which resource flows and services (e.g., nutrient cycling, erosion protection) useful for livelihoods are derived” (DfID, 1999, P.11). This capital is delivered through the availability of land and presence of green space in Jangwani. This is important to a human being because no one can survive without food produced and other environmental services.

*Physical capital.* This is the capital that supports the livelihood of the people through producing goods and basic infrastructure (schools, hospital, roads and water infrastructures). Infrastructure help people to be more productive and meet their basic needs.

### 3.0 METHODOLOGY

The study methodology involves the collection of both primary and secondary data. For the primary data Questionnaires, Observations, and Interviews was conducted. The secondary data include literatures on concepts, theories, and best practices on issues related to livelihoods and resettlement planning and implementation. The primary data collected from random selection of 110 respondents based on the Slovin’s formula indicated in Israel, (1992) as shown below which require a minimum of 99 sample:

$$n = \frac{N}{1 + N(e)^2}$$

Where,

N = Number of population

n = Number of sampling

e = Margin error

$$n = \frac{17647}{1 + 17,647(0.1)^2}$$

n= 99

However, during the data collection, the study was able to distribute 110 questionnaires to the respondents of Jangwani (Mtambani A and Mtambani B) as a sample obtained for this research and only 97 respondents were able to fill in the questions. The collected data were analysed using SPSS version 25.

#### 4.0 RESEARCH FINDINGS

##### 4.1 Status of livelihood assets in the original settlement (Jangwani area)

The study is interested to understand the five (5) livelihood assets available in Jangwani settlement in order to understand peoples, original living conditions and establish whether those played role in their decision to resist the resettlement.

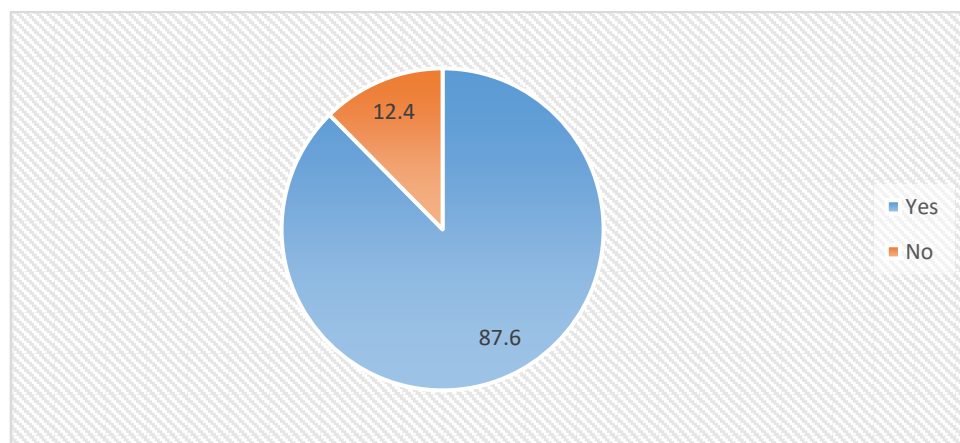
##### 4.1.1 Social capital

With regards to social capital this research tried to understand whether those who are refused to resettle are doing so because they perceive moving to Mabwepande would reduce their opportunity to access social network with their friends and relatives. There were different answers from respondents based on this social capital as shown below.

##### *Relatives/friend living in Jangwani*

The response of the respondents shows that, 87.6% have relatives and friends in Jangwani who they have been getting assistance in addressing their problems. However, Only 12.4% have indicated of not having friends or relatives who were relying on for getting assistance.

**Figure 3: Availability of relatives/friends for people living in Jangwani**



*Source: Field survey, (2018)*

##### *Social organization available in Jangwani*

Based on data results the study found that, there are few social organizations found at Mtambani A and B streets whether social welfare association or NGOs support about them. From this, we

can conclude that social organization in Mtambani A and B is not an important factor for them to refuse resettlement.

**Table 1: Availability of social organization at Jangwani**

Availability of social organization	Frequency	Percent
Yes	5	5.2
No	92	94.8
<b>Total</b>	<b>97</b>	<b>100</b>

*Source: Field survey, (2018)*

Based on data above, one can assume that social networks in the form of friends and relatives, more than in the form of presence of social organizations, may be an important factor for refusing to resettle to Mabwepande.

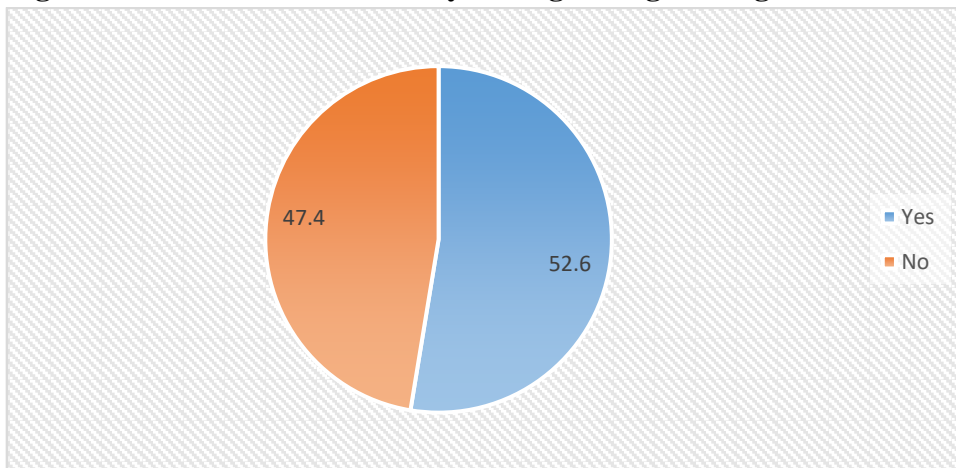
#### **4.1.2 Financial Capital**

The various financial assets that help people to support their livelihood includes accessibility to credit facilities such as (home based commercial activities, community saving groups) and employment opportunity. These are described below.

##### ***Member of community saving living in Jangwani***

The respondents are split into half when it comes to them being part of community saving group. (52.6%) have joined a savings group and most of those are women (47-women and 4- men). In the survey people indicated that joining saving groups was used as a strategy to handle family issues or taking care of home business expenses and not for the purpose of recovery flood events.

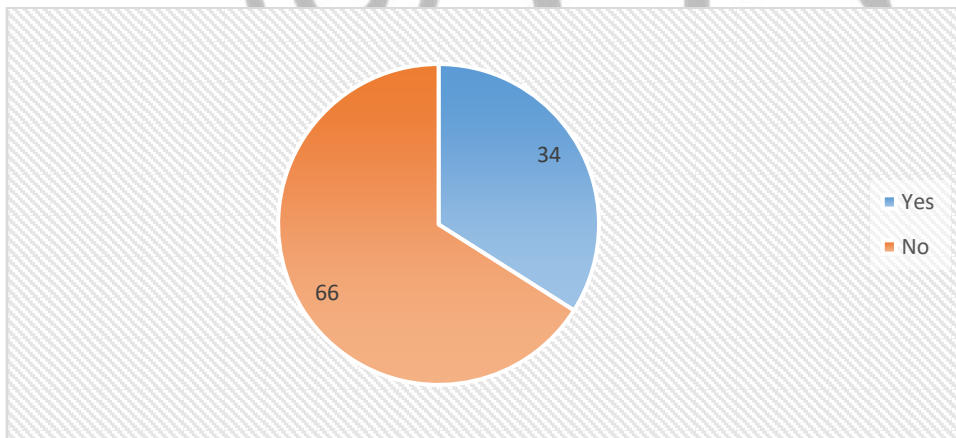
**Figure 4: Member of Community Saving Living in Jangwani**



*Source: Field survey, (2018)*

Furthermore, 34% of the respondents are involved in some form of home-based commercial activities. Most of those are small business which like food vendors and home hairdressings especially for women. There also available shops which stocks different products such as (foods, soaps, etc.).According to Figure 5 majority (66%) of the respondents have business activities in the city centre, some are working as technical workers (mechanics) around Jangwani and only few people do not have jobs. Based on the research observation those who do not have jobs are married women who depend on their husbands activities.

**Figure 5: Home Commercial Activity in Jangwani**



*Source: Field survey, (2018)*

Based on this we may assume that financial capital is a strong factor that may keep people in place rather than accepting to move elsewhere where working conditions are uncertain and relationships of trust that allow for community savings put into question.

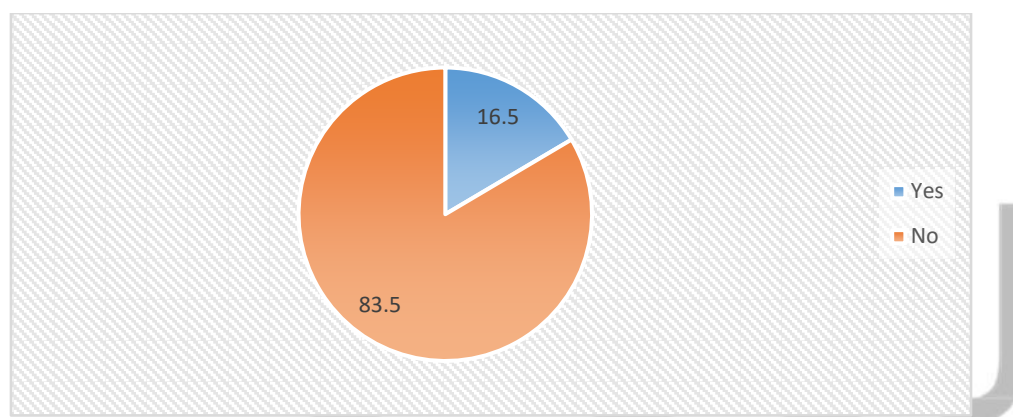
### 4.1.3 Human capital

The study also seeks to understand the characteristics of the informal settlers living in Jangwani area by observing the number of the family members, availability of skills and the level of education. The following was the results.

#### *Training and skills*

Most of Jangwani residents claim to have no skills earned from attending technical colleges, and a small percentage (16.5%) claimed to be doing self-teaching for technical skills such as carpentry, welding, and computer tasks. This is also confirmed by observation where the researcher saw different people/respondents doing those activities around Jangwani area. This implies that training opportunities in Jangwani area did not influence the resettlement decision by Jangwani residents

**Figure 6: Training and Skills Residence of Jangwani**

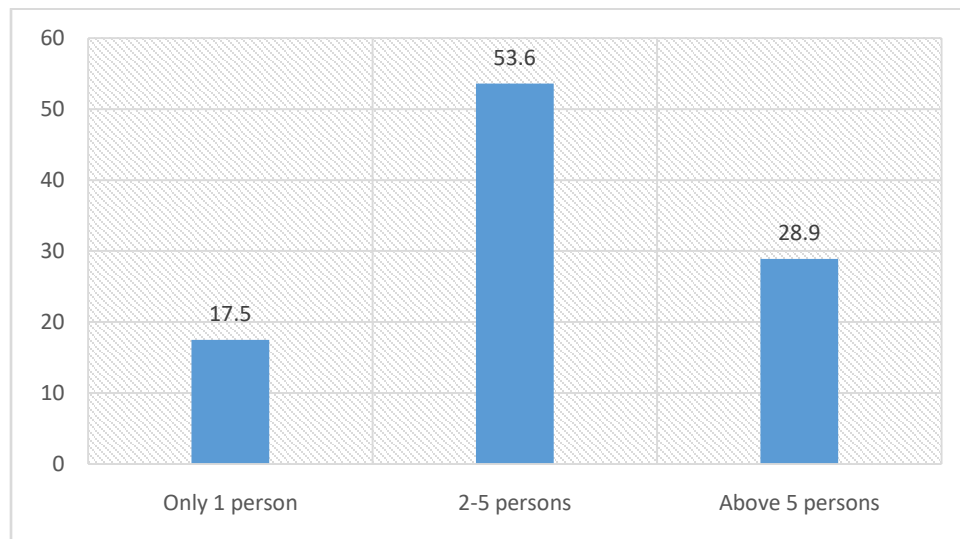


*Source: Field survey, (2018)*

#### *Family composition*

Most of the inhabitants who live in Jangwani have more than one children, and others live with their relatives. As the data shows that 53.6% of the households live in 2-5 persons, only 17% are live alone. To add on that, based on research observation study found that, most of the household in Jangwani composed 4-5 people. This is typical informal settlements characteristics whereby they usually live many people in a single household. Since the resettlement, they were to be put up in a tent, most of them felt the tent were small for the large family.

**Figure 7: Number of Family Members per Household**



*Source: Field survey, (2018)*

### ***Level of education***

It was found that the dwellers had very low level of education: 83.5% of them had only primary education, 9.3% had secondary education level and 7.2% had technical education.

**Table 2: Level of Education of Jangwani Settlers**

Level of education	Frequency	Percent
Primary education	81	83.5
Secondary education	9	9.3
Technical education	7	7.2
<b>Total</b>	<b>97</b>	<b>100</b>

*Source: Field survey, 2018*

Although many respondents did not receive training through college education, some get skills through self-teaching. We may assume that, people may have refused resettling to Mabwepande fearing lack of livelihoods opportunities matching their level of education such as carpentry, food vending, masonry etc.

### **4.1.4 Natural capital**

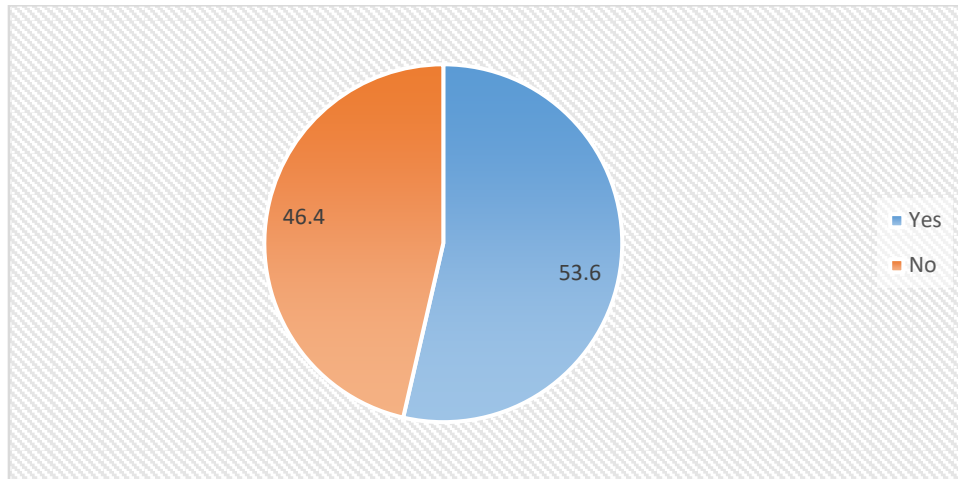
For natural capital the study was interested to look at the ownership of the land, land tenure, property right and availability of other resources that can sustain Jangwani dwellers to live in Jangwani.

### ***Ownership of the land***

The study found. 53.6% of the respondents found to own land without official certificate of occupancy or tenure rights while 46.4% were found not to own land. However, it was observed that people continue to encroach the declared hazard area by building houses, even after the first

resettlement of 47 people. The accessibility of encroaching land could be the reason for respondents to refuse resettlement. The situation seems worse in Mabwepande where respondents who accepted to resettle and were promised land tenure claims that, only 24 out of 653 (people who were affected by floods in 2011 from different parts of Dar es Salaam city including Jangwani) received property tenure rights.

**Figure 8: Land Ownership**

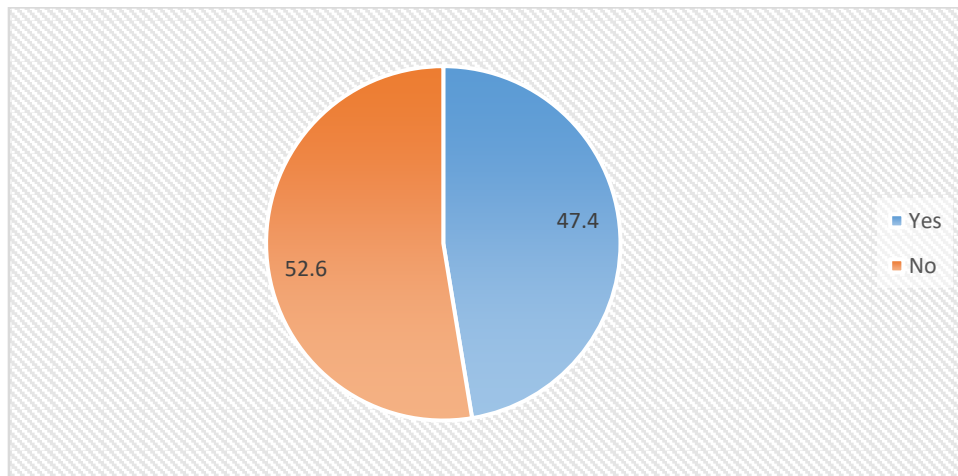


*Source: Field survey, (2018)*

#### ***Availability of green space***

While responding on the availability of land for recreation and economic activities such as farming, 47.4% of the respondents indicated the presence of green space along the Msimbazi river valley suitable for farming activities. However, they have indicated that only people outside Jangwani engaged in farming along the river valley.

**Figure 9: Availability of green space at Jangwani**



*Source: Field survey, (2018)*

In general the easy access to land was found to strongly influence the Jangwani dwellers to prefer staying in Jangwani rather than being resettled to Mabwepande.

#### **4.1.5 Physical capital**

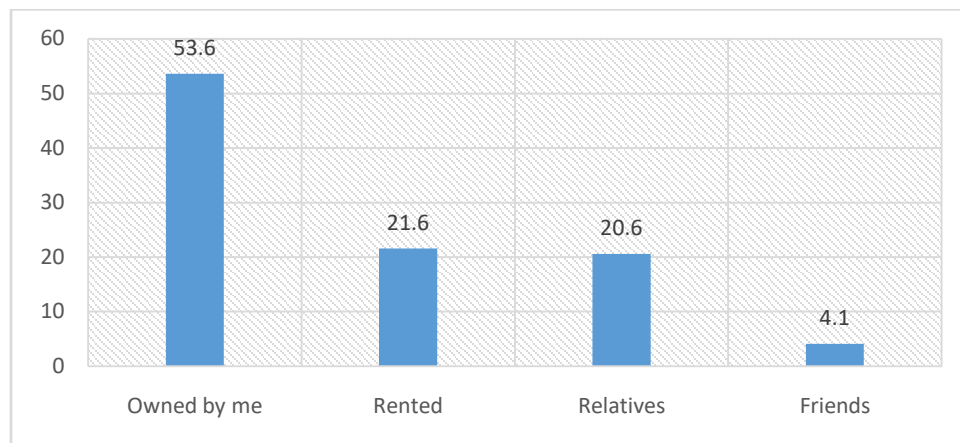
For natural capital the study was interested to look at housing, availability of basic services such as electricity, water system supply, roads, water collection facility, proximity to the water services, proximity to education institution and connection of the electricity to the households.

##### ***Housing***

While responding on house ownership 53.6% of respondents indicated to own houses; 21.6% of were tenants; 20.6% lived with their relatives; and 4% lived with their friends. For those who live in relatives and friends houses are accommodated for free. Based on observation, Jangwani area is surrounded by different types of houses that is constructed with materials such as corrugated iron-sheets and blocks. The houses were observed to be some in bad and some in good condition (mostly based on period of constructions). Depending on the quality of the the house the monthly rent ranges below Tshs.10,000 to Tshs50,000 (1 euro = Tshs 2,500)

This made it worthwhile to assume that access to housing and low cost of renting influenced Jangwani residents to refused to be resettled at a safer place.

**Figure 10:Ownership of house**



*Source: Field survey, (2018)*

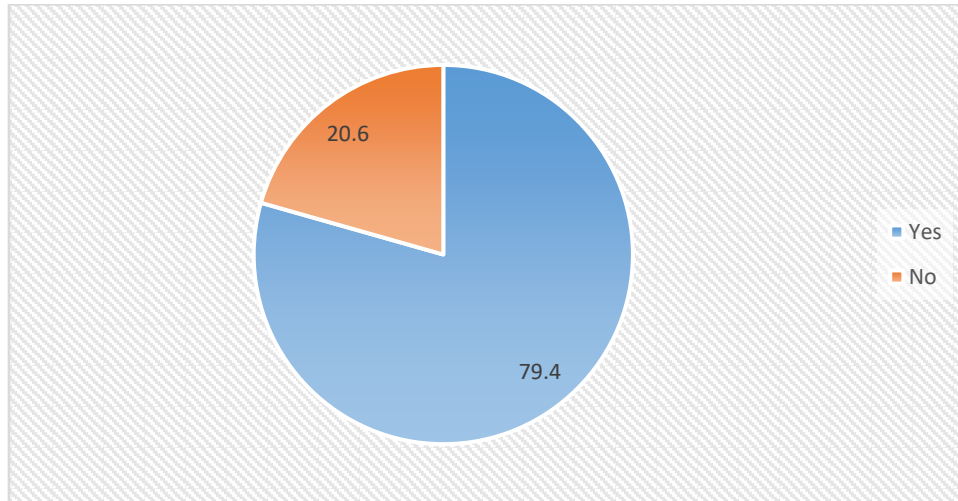
**Figure 11: Type of house that people rent for higher cost**



### ***Electricity***

There is availability of electricity infrastructure found in Jangwani area and most of the people have ability to obtain the services. From the table below 79.4% of the respondents' houses are connected with electricity. Only 20% do not have access to service. The electricity service is provided by organization which is Tanzania Electric Supply Company (TANESCO) under the Ministry of Energy and Minerals. Some services are available in Jangwani is due to political issues where by during the election campaigns they (contestants) promise people to provide basic services and after elections they force the government to provide those services to the areas.

**Figure 12: Availability of electricity facilities**



*Source: Field survey, (2018)*

**Figure 1: Electricity facilities found at Jangwani**



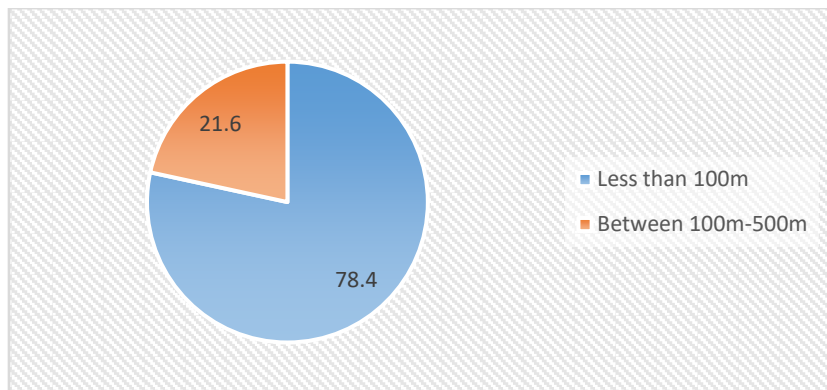
*Source: Field survey, (2018)*

### **Water**

There is availability of water supply infrastructure and water services in Jangwani area provided by body known as Dares Salaam Water and Sewerage Corporation (DAWASCO) working under the Ministry of Water and Irrigation. In the area there are some households connected with water services and other people get water from their neighbours at a fee, 1 bucket of 20L at the cost of Tshs100. This is considered expensive for a low income earner, for those are not connected

with water services in their homes. 78.4% of respondent said that, the distance to and from the water services is less than 100m; only 21.6% who said between 100m-500m.

**Figure 14: Availability of water at Jangwani for people who do not have piped water**



*Source: Field survey, (2018)*

**Figure 15: Water infrastructure**

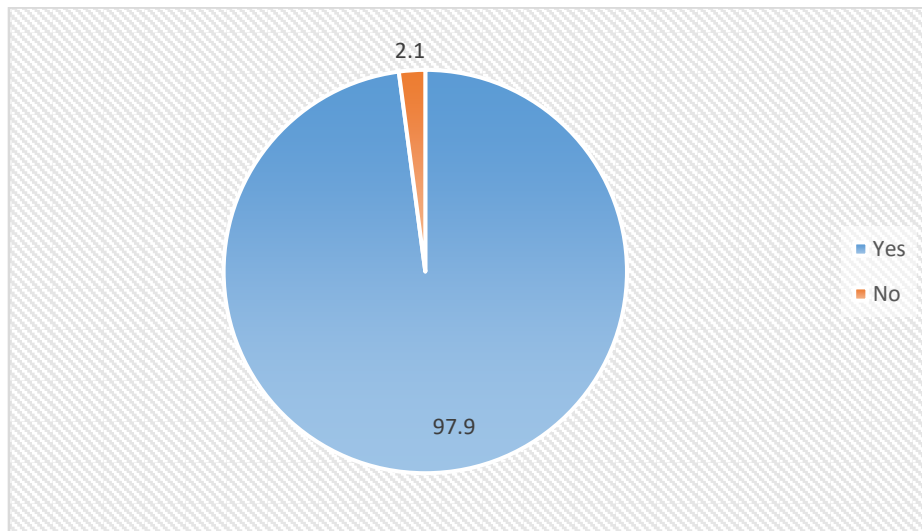
*Source: Field survey, (2018)*

### **Road**

There is presence of roads in Jangwani area. Many streets are connected with tarmac roads and the neighborhood are near the main road that makes dwellers to easily access the city centre. There are many transport options that people can choose namely buses, motorcycles and bicycles for their daily activities. Most people (97.9% said that there were presence of roads in the area. Moreover, the materials used to construct these roads are asphaltic concrete for street roads and concrete roads (rigid pavement).

**Figure 16: Availability of roads at Jangwani**





*Source: Field survey, (2018)*

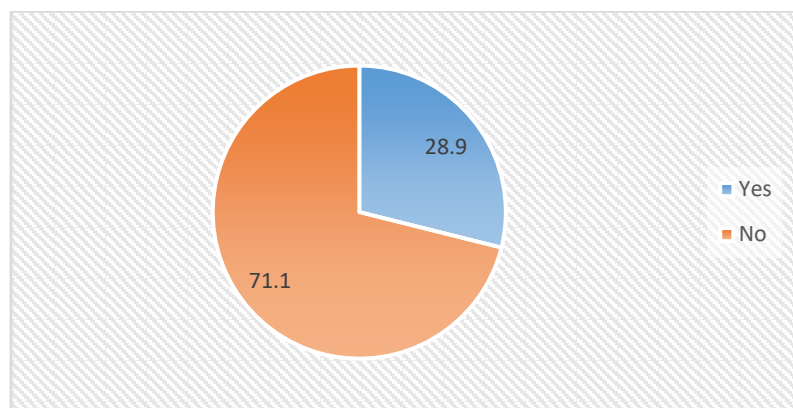
**Figure 17: Roads facilities found at jangwani**



### ***Water Drainage Infrastructure***

Majority of respondents about 71.1% noted that, there is inadequate waste water drainage infrastructure in the area. This causes the drainage system to be blocked because surface run-off is not well channelled and therefore causing floods during rainy seasons. In addition there is foul smell as a result of poor drainage of Jangwani area (*Jurisdiction office*).

**Figure 18: Availability of water collection facilities at Jangwani**

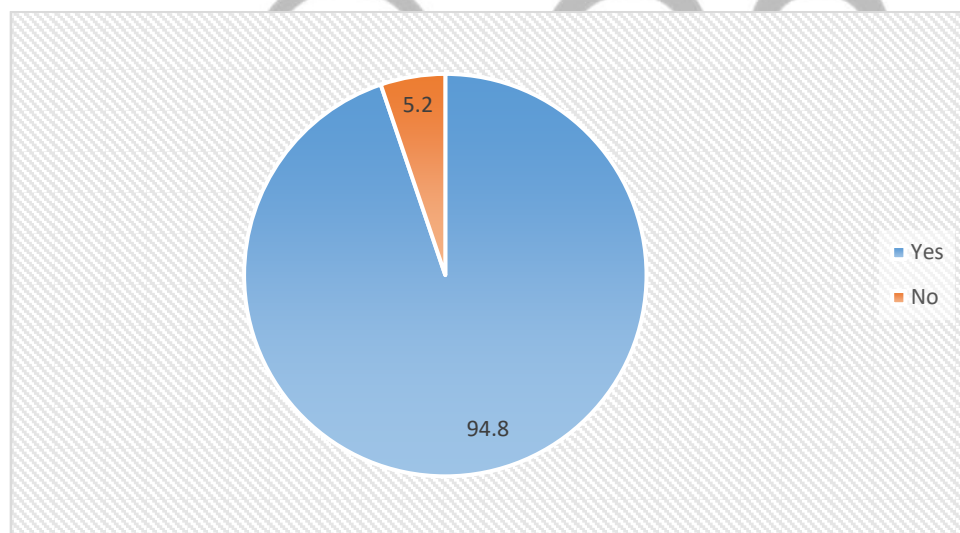


*Source: Field survey, (2018)*

### ***Food stores nearby Jangwani***

Data summary shows that most of the respondents have access to food stores within Jangwani where people purchase food stuffs. There are also many shops that offer different items such as food, detergents, clothing and shoes among other household goods.

**Figure 19: Availability of food stores at Jangwani**

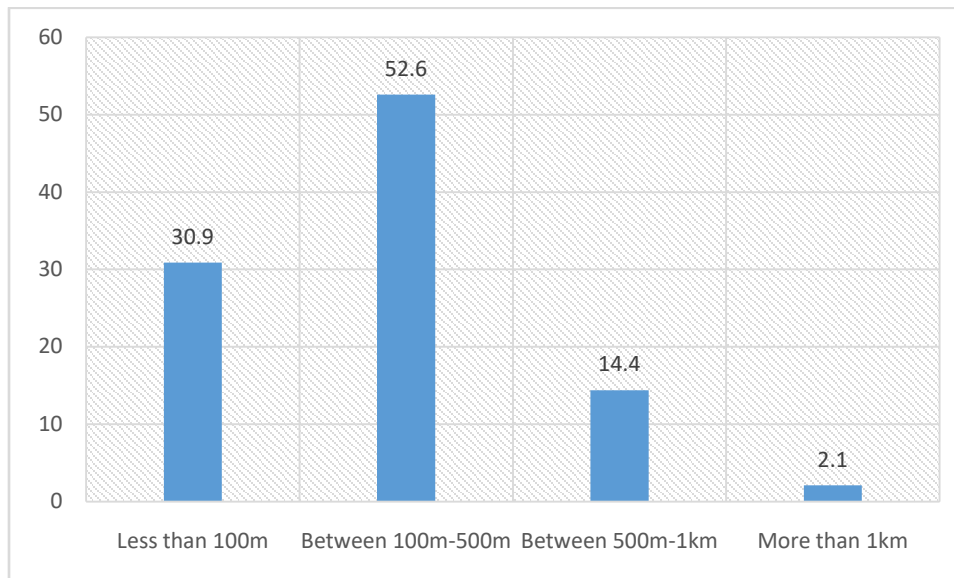


*Source: Field survey, (2018)*

### ***Proximity to schools***

In the survey, the distance from home to education institutions for 52.6% of the respondents was between 100m-500m. The respondents agreed that there were schools especially primary schools within walking distance. On the other hand, secondary and universities were almost 1km away from Jangwani. This data corresponds to the fact that, most of the respondents in Jangwani undergo only primary school education.

**Figure 20: Distance to education institution at Jangwani**

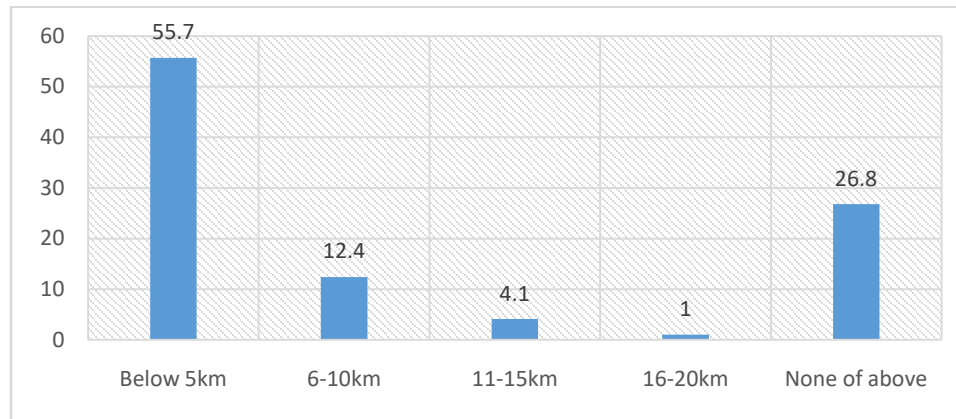


*Source: Field survey, (2018)*

#### ***Distance to employment area***

This study also aimed at looking at residents employments based on distance from home to the place of employment. Majority of the respondents are self-employed in business and technical skills services such as welding, carpentry and secretarial among others. In the survey, 55.7% of the respondents had their places of occupation within less than 5km from the city centre area. On unemployment 26.8% of respondents mostly women had no jobs. The unemployed women are mostly housewives who depend on their husbands for upkeep. The Figure below present distances covered by respondents to work:

**Figure 21: Distance to employment**



*Source: Field survey, (2018)*

In the data, availability of livelihood assets in Jangwani area (social capital, financial capital, human capital, physical capital and natural capital) may contribute to resistance of residents to settle in Mabwepande. The respondents are of the opinion that Mabwepande has no access of these services.

Jangwani is a typical informal settlement and residents have been victims of floods because of the insufficient drainage system and poor land use planning. Overall, Jangwani is the most vulnerable in terms of flooding compared to other areas because it is located in a valley with a shallow river depth (Werema, 2014).

Generally, availability of basic physical infrastructure may contribute to respondents' preference to live in Jangwani. As a result, the respondents feel that their relocation to Mabwepande will make them lose access to these essential services, which are insufficient in Mabwepande.

Nevertheless, the conditions of services in Jangwani are good compared to other informal areas in Dar es Salaam, that is because in Jangwani there is availability of good infrastructures such as presence of tarmac roads to the streets, presence of water infrastructures, availability of primary schools, proximity to the city centre for the business activities and availability of stores that makes people enjoy for the services. `

## 4.2 Relationship between Livelihood Assets and Resettlement Outcome

Some of the results above were analysed through statistical analysis. The relationship sought to understand whether there was a correlation (although not causation) between settlers livelihoods assets in Jangwani and their refusal to relocate. However, Out of the five factors, only financial and human capital was not able present correlation and provide the effects of the perceived opportunities in Mabwepande.

### 4.2.1 Relationship between decision made and Natural capital (ownership of land)

The correlation between the decision made (refuse to resettle) and land tenure in Jangwani is statistically significant (P-value = 0.000) and positive (Pearson C = 0.407). This analysis indicates that the more people felt that resettlement would reduce their chance of obtaining land tenure, the less they would move to Mabwepande.

**Table 3: Correlation between decision made and perceived of land ownership**

Correlations			
		Category	Ownership of land
Category	Pearson Correlation	1	.407**
	Sig. (2-tailed)		.000
	N	97	97
Ownership of land	Pearson Correlation	.407**	1
	Sig. (2-tailed)	.000	
	N	97	97

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### *a. Relationship between decision made and social capital (People who have relatives or friends in Jangwani)*

The correlation between the decision made (refuse to resettle) and presence of relatives and friend in Jangwani is statistically significant (P-value = 0.006) and positive (Pearson C = 0.276). This analysis indicates that the more people felt that resettlement would reduce the chance to be with their relatives and friend the less they would move to Mabwepande.

**Table 4: Correlation between decision made and perceived loss of relatives or friends**

Correlations			
		Category	Relatives/friends in Jangwani
Category	Pearson Correlation	1	.276**
	Sig. (2-tailed)		.006
	N	97	97
Relatives/friends in Jangwani	Pearson Correlation	.276**	1
	Sig. (2-tailed)	.006	
	N	97	97
**. Correlation is significant at the 0.01 level (2-tailed).			

***b. Relationship between decision made and Physical capital Availability of water infrastructure***

The correlation between the decision made (refuse to resettle) and availability of water infrastructure in Jangwani is statistically significant (P-value = 0.004) and positive (Pearson C = 0.290). This analysis indicates that the more people felt that resettlement would reduce their chance of obtaining water infrastructure the less they would move to Mabwepande.

**Table 5: Correlation between decision made and perceived effect on availability of water infrastructure**

Correlations			
		Category	Availability of water infrastructure
Category	Pearson Correlation	1	.290**
	Sig. (2-tailed)		.004
	N	97	97
Availability of water infrastructure	Pearson Correlation	.290**	1
	Sig. (2-tailed)	.004	
	N	97	97
**. Correlation is significant at the 0.01 level (2-tailed).			

***c. Availability of roads infrastructure***

The correlation between the decision made (refuse to resettle) and availability of roads infrastructure in Jangwani is statistically significant (P-value = 0.000) and positive (Pearson C = 0.380). This analysis indicates that the more people felt that resettlement would reduce their chance of obtaining roads infrastructure the less they would move to Mabwepande.

**Table 6: Correlation between decision made and perceived effect on availability of road infrastructure**

Correlations			
		Category	Availability of road infrastructure
Category	Pearson Correlation	1	.380**
	Sig. (2-tailed)		.000
	N	97	97
Availability of road infrastructure	Pearson Correlation	.380**	1
	Sig. (2-tailed)	.000	
	N	97	97

\*\* Correlation is significant at the 0.01 level (2-tailed).

**d. Availability of electricity infrastructure**

The correlation between the decision made (refuse to resettle) and availability of electricity infrastructure in Jangwani is statistically significant (P-value = 0.001) and positive (Pearson C = 0.347). This analysis indicates that the more people felt that resettlement would reduce their chance of obtaining electricity infrastructure the less they would move to Mabwepande.

**Table 7: Correlation between decision made and perceived effect on availability of electricity infrastructure**

Correlations			
		Category	Availability of Electricity infrastructure
Category	Pearson Correlation	1	.347**
	Sig. (2-tailed)		.001
	N	97	97
Availability of Electricity infrastructure	Pearson Correlation	.347**	1
	Sig. (2-tailed)	.001	
	N	97	97

\*\* Correlation is significant at the 0.01 level (2-tailed).

**e. Availability of water collection facilities**

The correlation between the decision made (refuse to resettle) and availability of water collection facilities in Jangwani is statistically significant (P-value = 0.001) and inverse (Pearson C = 0.344). This analysis indicates that the more people felt that resettlement would reduce their chance of obtaining water collection facilities the more they would move to Mabwepande.

**Table 8: Correlation between decision made and perceived effect on availability of water collection facilities**

Correlations			
		Category	Availability of water collection facility
Category	Pearson Correlation	1	-.344**
	Sig. (2-tailed)		.001
	N	97	97
Availability of water collection facility	Pearson Correlation	-.344**	1
	Sig. (2-tailed)	.001	
	N	97	97
**. Correlation is significant at the 0.01 level (2-tailed).			

**f. Ownership of housing**

The correlation between the decision made (refuse to resettle) and housing in Jangwani is statistically significant (P-value = 0.009) and positive (Pearson C = 0.263). This analysis indicates that the more people felt that resettlement would reduce their chance of obtaining house the less they would move to Mabwepande.

**Table 9: Correlation between decision made and perceived effect on housing ownership**

Correlations			
		Category	Ownership of house
Category	Pearson Correlation	1	.263**
	Sig. (2-tailed)		.009
	N	97	97
Ownership of house	Pearson Correlation	.263**	1
	Sig. (2-tailed)	.009	
	N	97	97
**. Correlation is significant at the 0.01 level (2-tailed).			

**5.0 CONCLUSION**

Despite having some other factors such as resettlement planning and risks paradox that might affect the compliance of the resettled community, the livelihood assets was found to play a major role in influencing the unsuccessfulness of the resettlement of the Jangwani residents to Mabwepande. Fear of losing their houses (Physical capital) of which also most of them earn income through renting, losing their income generating activities (Financial capital) such as plumbing petty trading, masonry, mechanics and tailoring at city centre, losing their land (Natural capital) proximal to the city centre, and losing the network of their friends and relatives

(Social capital) from whom they got assistance have greatly found to influence the Jangwani residents to return back to Jangwani after resettlement. The human capital have found to have a lesser impact compared to the four aforementioned capital assets

## 6.0 RECOMMENDATION

Therefore for successful resettlement the study there must be clear view of the availability of social-economic aspects in the resettled area. This will motivate people to relocate due to the motivation of existence of social, economic factors that will promote their integration. Kironde,(2016), explains that communities will prefer to live in risk area that has well-established socio-economic patterns than relocate to safer areas but lack such amenities. Some of the social, economic factors that might motivate the community to resettle in a new area include: closeness to areas that offers them job opportunity, economic benefits due to the business activities, easy to access land and ownership and presence of good infrastructure such as water and roads.

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