# Nutrition, Water, Sanitation & Hygiene Assessment among

# Urban Poor Children and Adolescents:

# A Community Case Study of Tandale Slum in Dar es Salaam, Tanzania

**OCTOBER 2019**

**DISCLAIMER:** This brief is made possible by the support of the American People through the United States Agency for International Development (USAID). The contents of this brief are the sole responsibility of Ifakara Health Institute and do not necessarily reflect the views of USAID or the United States Government. Health Evaluation and Applied Research Development (HEARD) is funded by the United States Agency for International Development (USAID) under cooperative agreement number AID-OAA-A-17-00002. The project team includes prime recipient, University Research Co., LLC (URC) and sub-recipient organizations.

## Executive Summary

This project presents the findings from qualitative assessment of urban health, being a case study of Tandale slums in Dar es Salaam. The aim of the study was to assess maternal, children and adolescents nutrition & WASH vulnerabilities. The study adopted a qualitative, exploratory, cross-sectional design. Data collection was done in two stages where the first stage included slum dwellers living in Tandale. A total of 8 Focus Group Discussion (FGD) was done with mothers having children under two years (2), Fathers with under two years (2), adolescent girls and boys (2) and village and ward leaders (2). The second stage involved collection of data using interview guides from key informants. The key informants identified were local government officials as well as municipal officials. Purposive sampling was employed to get all the response. Data were transcribed, coded and analysed using NVIVO version 12, then presented in themes and sub-themes following UNICEF theoretical conceptual framework of malnutrition. The analysis revealed that slum communities were disadvantaged in terms of health, nutrition and WASH services and were less knowledgeable about malnutrition and its causes. Therefore, the study recommends the development and implementation of various policies and key initiatives that will address health, nutrition and WASH vulnerabilities in the slums covering women, adolescents and children under-fives.

**TABLE OF CONTENTS**

### 1.1 Statement of Research Objectives

Slums are not a new phenomenon, they were a distinctive feature of European and US cities during the Industrial Revolution, and they persisted in some of these cities well into the twentieth century. In the past, moderate to radical policy solutions were adopted to address the overcrowding and unsanitary conditions in those areas (Marx et al., 2013).

Some of today's slums are in countries experiencing rapid economic growth, such as China, but many slums are located in countries with slow or stagnant growth. The prevalence of slums is highest in Sub-Saharan Africa, where slum dwellers represent 62 percent of the urban population. As of 2005, the three countries with the highest fraction of the urban population living in slums were Sierra Leone, Sudan, and the Central African Republic—all located in Africa (UN-Habitat, 2012).

In Tanzania and elsewhere in Africa, the slum problem is worsening over time. Africa's slums are growing at twice the speed of the continent's exploding cities. For example, 85 percent of Kenya's population is contained in the crowded slums of Nairobi and Mombasa while in Tanzania, 60% of the urban population lives in slums (World Bank, 2014). In 2015, Africa had 332 million slum dwellers, a number that has continued to double every fifteen years. Currently, according to the estimates presented by UN-Habitat, the world's highest percentages of slum-dwellers are in Ethiopia, an astonishing 99.4 percent of the urban population (Davies, 2006).

This case study aimed to find a snapshot on health, nutrition and WASH situation in slums of Tanzania and discover how children, adolescent and women are vulnerable to the situation.

### 1.2 Data collection methodology

The methodologies used in this study include community mapping with key informants, key informant in-depth interviews and Focus Group Discussions (FGDs). A total of 8 FGD and 5 Key Informants Interviews were conducted as indicated below:

| **Group** | **Number** |
|---|---|
| Adolescents group 1 | 8 |
| Adolescents group 2 | 6 |
| Key Informants Interviews | 5 |
| Local Government Authority | 6 |
| Men's group1 | 11 |
| Men's group 2 | 7 |
| Women group 1 | 9 |
| Women group 2 | 9 |
| Ward leaders | 11 |
| **Total** | **72** |

### 1.3 Research Findings

This study set out to demonstrate a snapshot on health, nutrition and WASH situation in slums of Tanzania and to find how children, adolescents and women are vulnerable to the situation. The enquiry was based on the view that although slum management approaches consider that there are other crucial components, the factors that constitute the malnutrition and hardship of life in slums are seldom understood.

This study took the view that the slum community is poor or in most times their income is low or inadequate to cover their food and health expenses. This sets them into a vicious circle which begins by such person's first going to low income houses where they can afford or where they can find relatives to accommodate them in the initial stages as they try to look for jobs and acclimatize in the city. This qualitative research found that:

1. Most slum dwellers are either unemployed or earning income through informal entrepreneurial activities. There were not enough economic opportunities in Tandale. The monthly expenditure on rent, food among others was closer or higher than the income earned. This means that slum dwellers were not making a sufficient living and unable to survive. How then did they cover most of their basic expenditure of life? The study found out that the residents tended to engage themselves in informal entrepreneurial activities where they earned their little income on a daily basis and in some cases, they engaged in risky behaviors such as prostitution.
2. The study also found out that the social component formed a very crucial factor in slum formation. For example, most of the slum residents first joined Tandale from the rural areas using acquaintances who were friends or relatives and most of them were from the ethnic background of the migrant. This shows that ethnicity was a crucial factor in the initial stages of rural-urban migration and the slum formation in particular. These networks that are social in nature can be seen as two faceted, first as the main factor during slum formation and two as the main factor which helps the slum dweller to survive under the difficult circumstances which they find themselves in the slum. Changes brought about by slum upgrading and other slum management programs puts the slum people in a situation where these networks are broken and therefore vulnerable.
3. Most respondents did not appreciate the condition of health systems available in Tandale. They believed that the hardship of life experienced in Tandale has direct connection with the fact that there is a poor health system in the neighborhood. The respondents highlighted that if there was a good health system, they would have been receiving appropriate health services.
4. During the FGDs, it seemed that participants were very excited to have an avenue to explain their challenges with the expectation that the existing challenges would be resolved. This situation demonstrated that slums dwellers were not fully involved during planning or implementation of activities in their area. On the other hand, key informants, especially local government officials established that they did not receive enough cooperation from dwellers especially when they call them for meetings. They stressed that most children in the slums have malnutrition and the parents do not take any initiatives to help. The prevailing situation highlights the need to find the right forum/platforms for slums dwellers to be involved.

### 1.4 Key Actors and Platforms that Influence Nutrition of Children

From the Municipal team, there are no direct stakeholders working on the issue of nutrition in slum areas including Tandale. However, there were many stakeholders who go directly to the communities to implement programs and most probably there could be those dealing with nutrition among other things but could not be identifies.

Although every stakeholder who enters to the community has to pass through the municipal before their entry can be approved but some activities were not very clear when being implemented. Lack of proper feedback always affect the possibility of well documenting community level interventions. These statements clearly highlight the need to have a coordinated structure from national to local level that monitor implementation of WASH, health and nutrition in slums, clarity of the proposed work and feedback mechanisms.

*"Stakeholders often go directly to the community where they are known in ward rather and municipal council level. Yet, not most of the activities are known to the municipal. That's suffice to say there no nutrition stakeholders."* - Participant, Key Informant Interview

**1.5 Stakeholders implementing urban slum improvement activities or projects**

There are stakeholders known to deal with WASH issues and one of the most mentioned is DAWASA/DAWASCO. Few members could identify the service but not the name of institution providing the service (see the quote below). DAWASA as a government entity dealing with water, sanitation and sewage systems was mentioned in almost every group. If there are other organizations dealing with water services in the area, most community members are said not to be aware of anyone rather than DAWASA.

*".....organizations that provide services like water and electricity, organizations can be many but the person just sitting at home only sees the pipes coming to their home but you don't know what organization is involved. Some see wells being brought, you just see, but you don't know the organization involved. But in water services, the wells, or pipes it is difficult to know the organization's name. It is not easy, to know which organization is involved and dealing with these things becomes a difficult subject."* - Participant, Key Informant Interview

DAWASA was said to have a program to ensure that every household in the area is connected with a piped water, although that is not the reality. Not every household has a water pipe in the area, but there are also private water points/kiosks available in the subsets of the area. DAWASA work hard to fix pipes although in most cases the water in unavailable.

*"In the past, you would find water scarcity for almost a week. It happened sometimes we did not have water for two weeks. People were suffering, though for some people it was the right time to make money out of it. "*- Respondent, Men's Group1

If water is missing, people have only the option to buy from the private kiosks owned by their fellow community members. This would cost them about 150/- to 200/- Tsh. and sometimes as high as 500/- for a bucket of 20 liters if shortages persist.

*"Since this government came into power, we have never experienced such adversity again. It does not mean that everything is okay, but at least we are being alerted if there would be water cut and it is given a very short period before we have the water back."* - Respondent, Men's Group1

People may have piped water in their homes but sometimes they fail to pay huge water bills if they have exceeded the amount they could afford in a month or if there are delays in paying the bills. Interviewees reported that DAWASA normally cut out the utility until the bill is paid. Some people who owned piped water were selling water to their neighbours and people around in the area. Water prices fluctuate depending on the availability. It costs 100/- a bucket when water is available, but raises from 200/- to 500/- when there are water shortages.

*"In our area, availability of water is a challenge. We have pipes but sometimes no water, in time of water shortage they sell one bucket for 200 or 150 or more."*- Respondent, Adolescent Group1

*"There people who preserve water in their tanks, to be sold when there is a shortage of water. When it prolongs for a long time, they sell up to 300 shillings a bucket."* - Respondent, Men's Group2

Even when there is water available, it is not always clean in the slum community. There are times when water was seen to have small, visible but unidentifiable particles. Community members often assume water contamination occurs due to poor infrastructure. Some water pipes are damaged or being cut when people dig into the ground or during road construction. They are poorly fixed by tying them with rubber straps and leave the possibility of contamination from the soil. Some community members indicated that they have experienced an unusual odour in their water which they claimed to be water treatment drugs called water guard. But this was said to be with few exceptions, the majority of respondents noted they had clean water.

*"I don't know for sure, but it has a smell of some kind that you are not used to like that (water guard) which comes from the pipes."* - Respondent, Women Group1

It was claimed by most of the discussion groups that water is no longer a big problem in Tandale. Although DAWASA is predominantly the water service provider in the area, and community members noted challenges with them, other sources of water were also available. For example, there are several individuals who constructed long water wells in the area and are selling the utility to others. In addition, a big government water project known as MAJI YETU has been involved by sending health scientists and experts to treat water from private owned water wells and they provide education on how to preserve water.

The issue of affordability of water was not a strong focus compared to availability and maintenance/quality of pipes. Maintenance/quality of pipes seemed to matter a lot as community members complained about DAWASA's seriousness and accountability. The respondents stated that DAWASA have been delaying a response to water leakage from the pipe which resulted to unnecessary water loss. They also employ technicians who are simply believed to be 'careless.'

*"They come carrying pipes on their shoulder and other connect water service to your house, but only to a surprise, the following day the pipes bursts. I don't know what technique they are using, some pipes are not buried deeply, and when a person passes with a sharp object, it may cut the pipe. Eventually, the pipe leaks and sucks air and they become contaminated and unsafe so in our meetings, we insist people to boil water. For DAWASCO when they want to connect water to someone, even if there is a water ponds, they should understand that when the pipes leaks it will suck dirty. The government should look at DAWASA, there are so many workers in DAWASA but how are works been done?"* - Respondent, Ward Leaders

Another notable challenge with respect to water service delivery emerged especially when people wanted to have water connection.

*"I think DAWASA have not improved because when a citizen come to request for a water connection, there are unnecessary delays. You might have vital documents which you require for water connectivity but the bureaucracy really annoys. This makes people not to follow appropriate procedures. It enforces them to use unprofessional people to connect water"* - Key Informant Interview

The Tanzania Social Action Fund (TASAF) is another stakeholder that was mentioned. TASAF is a government-initiated institution working to enhance its efforts on poverty reduction. TASAF is providing support to Tanzanians living in extreme poverty for the purpose improving their living standards, through the provision of productive social safety net program. The organization has been frequently mentioned in the community since Tandale has a good number of beneficiaries for the program.

Community members in Tandale mentioned that they rely mostly on government for infrastructure improvement such as road construction, but for housing they rely on owners. Slum upgrading which is done by road construction in order to reduce congestion is part of the Dar es Salaam Metropolitan Development Project (DMDP) as stated by one interviewee.

*"This is a big road construction project, its main focus is to upgrade slum areas. If you have gone through Tandale you would have observed there is rod construction going on. They are improving road infrastructure in areas with high congestion and low economic conditions."* - Key Informant Interview

Under the DMDP project, roads are being constructed by the Tanzania Rural and Urban Road Agency (TARURA) which was established in 2018. The municipality, on the other hand, is dealing with the construction of the trenches in places that are prone to floods. The trenches are being constructed for both the purpose of dealing with the floods but also as a sewage system. Community members appreciate that the trenches played a great role, but Tandale geographical position is very challenging. Most areas in Tandale ward are having a levelled surface, hence without raised areas or indentations, it makes it harder for the rainwater to flow to the rivers. The nearby rivers Ng'ombe and Kiboko which collect water from the neighbourhoods are always flooded during the rain season, increasing contamination and outbreak of diarrhoea and cholera.

At council level there is a disaster risk committee when flood risk happens and they receive direct support from the government during emergencies. Also, Red Cross Tanzania was mentioned as another organization for disaster preparedness especially during the time of floods. They provide first aid services,

evacuation and temporary shelters for affected families. Participants mentioned a government health centre as an institution along with private dispensaries and laboratories that provide health services. They mentioned that sometimes people may first seek health services by going directly to the laboratories for blood and malaria testing and other common diseases such as urinary tract infections or typhoid and are then directed to buy prescribed drugs from the pharmacy, even without seeing a doctor.

**1.6 Barriers/opportunities for engaging with non-health/nutrition focused organizations**

One limitation was that slum dwellers are highly fluid and dynamic and therefore some of the dwellers had just moved in to the settlements and did not possess much information about lived experience in the slum. Most organizations therefore locate and use key informants like religious leaders, government officials and school teachers to gather information. Another limitation is that some dwellers refuse to be interviewed as part of studies by most organizations, contributing to failure of most projects.

**1.7 Formal/informal systems and services for healthcare related to child nutrition**

Formal and informal services for healthcare related to children's nutrition that are available in the community include a government health centre and private dispensaries. The large population of Tandale ward uses the available government facility for both outpatient and inpatient care and nutrition services. Participants reported limited childcare services since most existing services are informal. Most children are left with friends, neighbours, relatives or siblings which predispose them to inadequate care. Contributing to this was a high number of single mothers, entrepreneurship and adolescent motherhood.

In the adolescent groups, when they were asked if they have to compare the health services given from Tandale and other places, they commented that the services from Tandale Health Center are much better compared to another government hospital in Sinza. The difference was seen on how mothers and pregnant women are given priority.

*"In Sinza there were long queues comparing to what you can saw in Tandale. I think the services here were much better, because I have been to both places."*- Respondent, Adolescent Group

*"It's because Sinza is a big hospital with many services, so many people go there, such situation reduces the efficiency of services. There are not many people at Tandale and the services are good."* - Respondent, Adolescent Group

Adolescents also admitted to choosing Tandale over Sinza because the services in Tandale are better. However, they stated that private facilities were much better than Tandale but they cannot afford private services. The men's group provided different information regarding the quality of care. For them, the services from Tandale Health Centre were poor because of inadequate staff like doctors and nurses, lack of health equipment and limited availability of some services. Men's group respondents also mentioned long queues at the facility because of the limited number of providers.

*"I remember we brought a guy who was injured and was bleeding badly, but we were suspended for hours without being attended. Finally they referred us to another hospital because they said they couldn't deal with the situation. We have lost enough time there for nothing."* - Respondent, Men's Group

**1.8 Pregnancy health services available in the community**

The majority mentioned health care facilities as a main place to access health and nutrition services related to mother and child during the prenatal and postnatal periods. The facilities were said to provide regular check-ups of pregnant mothers and to treat and prevent potential health problems throughout the course of the pregnancy and after. At the facilities they also promote healthy lifestyles that benefit both mother and child. Both groups of women and adolescent mothers confirmed accessing the services offered from the health centre.

Women's group participants added that at the health facility, they have access to health education on a variety of specific issues in nutrition and emphasis is given on the importance of accessing foods containing all kinds of nutrients, iron supplementation, and use of antimalarial and deworming drugs. Mothers said that they are taught to eat a balanced diet during pregnancy and at least four meals per day. These lessons were organized every day at the centre.

*"We recommend that, pregnant women should eat a balanced diet. We are telling them that, if they eat 'ugali' they can get starch, but they should also eat vegetables and other groups of foods with vitamins, minerals and proteins."* - Key Informant Interview (maternal and child health worker)

The existence of traditional healers or traditional birth attendants was not mentioned by health providers and the community. However, a group of women mentioned that young mothers may seek advice from older respected women about social taboos to be considered during the pregnancy period. The advice may not be related to health issues, because the community is already aware of the importance of health services.

Women start attending health services related to pregnancy at early stage as one or two months of conception. It is easy for married and older women to seek health services than the young and first visit (time) mothers especially those who are not married.

*"Let say a girl is still at school (studying), it is obvious that she cannot rush to the health centre for pregnancy services. She would want to hide until it is too late."* - Respondent, Men's Group2

*"Or if a young woman is having relationship with a married man, do you think she can go to the clinic as soon as she know she is pregnant? Of course not. There they will ask them to bring their husband at first attendance. So, they have to look around for any available man to act as her husband to accompany her."*

- Respondent, Men's Group2

This practice of asking pregnant women to be accompanied by their spouses has to some extent put young and unmarried women into unnecessary delay to access pregnancy services.

**1.9 Comparison of the health and nutrition services offered in Tandale clinic as compared to other clinics**

Health services offered at the health centre in Tandale were said to be the same as to the most nearby government dispensaries. What is slightly different is the number of people served in the Tandale Health Centre. The most common characteristic distinguishing health facilities in Tandale and those facilities around was long queues to see the doctor. Patients have to wait for a long time before they can be attended,

and although the services are affordable, patients still have to buy prescribed medicines at the pharmacy stores.

There was another slight difference between government-owned facilities and the private dispensaries. In private dispensaries, health workers are friendlier and more welcoming compared to the government health centre. Usually people avoid long queues to see a doctor for consultation and services by attending private facilities. Government health facilities offer low cost services compared to the private facilities, but when cost is not an issue, the private health facilities are often preferred.

*"You know, going to a health centre (private health facility) is that you are going to see your own doctor. But for most of us, we are going to the available services not because they are better, but that's the only option we can afford. It is like you are going to the prison, you must follow the 'rule,' you are told to sit here or there. A doctor passes and look at you, but they are busy. You stay in the long queue but you don't know whom you are going to see. That's it"* - Respondent, Men's Group2

*"If you have money, then the option is to go to the private hospital where you can spend a lot but you get good services. There you find one or two people waiting for a doctor, not like here, a queue of 15 people are waiting to see the same doctor. People say the services in the government hospital are good, but then there are no medicines."* - Respondent, Men's Group2

*"There are differences because anything that is quality is expensive, and being expensive is being well off. For us, Tandale residents we have low income. You cannot compare the services that are available in Tandale even though we are very thankful that we are getting services better than previous but is incomparable to private hospitals."* - Respondent, Local Government Authority

**1.10 Formal/informal food systems and services in the community**

The government has a nutrition program that targets all under-five children including those in Tandale. The program includes a campaign for vitamin A supplementation done twice a year in June and December. The campaign also includes weight checking, assessment of nutritional status using mid upper arm circumference (MUAC) tape, deworming and advice/referral to mothers with malnourished children.
Women who were interviewed also acknowledged being given nutritional supplements that should be added when preparing meals for their children. These additional supplements are sold to mothers and health care workers insist on use.

*"Services that are available in hospitals, which are the most important are the drops and injections given to children; and right now, there are these supplements as they call it.... If you go there with a child for check-up, the nurse would emphasize that you buy supplements for the child."* - Respondent, Women's Group2

*"It costs 500/-Tsh, and you can buy it at you own capacity, but they tell you to give it to the child every day… only give one a day (packet).* - Respondent, Women's Group2

*"But now, these supplements I'm not sure if they help a child. Because look at my son there, you see him? When he was younger, I gave him the same supplements, but every time I took him to the clinic his weight was the same... you see.* - Respondent, Women's Group2

A lot of education and emphasis on nutritional needs is given to the communities but challenges exist around the ability of households to feed their families properly. A combination of challenges includes economic constraints for families to afford food varieties but also time to prepare food, as some parents spend most of their time in income generating activities.

*"There is a group of workers, perhaps employed as bar maids or those engage in entrepreneurial activities, they usually leaves their children with the neighbours. Sometimes they leaves them unattended with the relatives or friends. They don't care about the child's wellbeing at all and eventually a child ends being supported by organisations."* - Respondent, Ward Leaders

*"… our situation here at Tandale, we all know that we have low incomes. Someone comes and tells you "I am stuck, please borrow me 'may be you are in the food business,' borrow me one plate and I will bring the money tomorrow." And you lend them a plate, but tomorrow that same person starts avoiding you. They don't pay. The food you give, you could have sold to someone else, because you are in business and that's the capital. You need to make profit. But you have to help others and you will end regretting."*- Respondent, Women's Group2

Comments from different groups about breastfeeding behaviours did not differ a lot although all groups mentioned that breastfeeding should start immediately i.e. few hours after delivery on the same day. They all said that these instructions were given by the nurses at the health centre.

Mothers also knew the importance of exclusive breastfeeding for the first six months with the exemption of food or even water, but the two groups of women reported to have initiated mixed feeding by introducing food and water as early as three months old.

*"We start giving water. We boil water, and let it cool then slowly we give to children when they are at least three months. Some people start giving food at that age (six months). I did the same for sure.*

Challenges to exclusive breastfeeding that have been mentioned by mothers include the perception that breastfeeding alone is not enough. They believe that children do not get enough of their nutritional needs met and they cannot only depend on milk. Mothers have mentioned that sometimes they feel the milk is too light and so the child might be starving.

Another challenge mentioned is the time to breastfeeding and for child care. Most mothers are either engaging in subsistence household income generating activities or work in areas far from their neighbourhoods. They do not have proper maternity leave where they can give full concentration to take care of the children for that longer period. Also, there is a challenge of socio-economic pressure to afford balanced diet for mothers.

*"If you have not eaten enough food, you are unlikely to produce enough milk for your baby. This is what we know, so the option is to start giving food to younger children."* - Respondent, Women's Group2

Most young mothers did not want to breastfeed their children for too long because they need to keep their breast as fresh as they were before pregnant. In addition, they did not know proper duration the mothers should breastfeed their children. They said, it can be six months or one year and a half and some mentioned two years.

Several other cultural ideas around infant feeding came up during the discussion with adolescent mothers, older women and fathers. Mothers were breastfeeding their children whenever they hear them crying i.e. there is no proper time to breastfeed them.

*"Sometimes children are not well pampered or they are just tired but parents do breastfeed them in order to calm them down."* - Respondent, Adolescent Group Two.

Other ideas emerged such as, if a mother is HIV positive they should stop breastfeeding their children and should ask someone else they trust to do that on their behalf. Additionally, other mentioned that if the mother is having an affair with a man outside marriage, the milk will go bad and should not breastfeed the child. If it happens that the child is breastfed that milk, the child will be weak and not able to obtain development milestones, the so called *"Kubemendwa"* in Kiswahili.

**1.12 Social behaviour change communications (SBCC) information is available**

A group of ward officials pointed out that there are regular street education campaigns conducted by a health extension officer to educate community members on health issues and those related to food and nutrition. This effort is a part of a behaviour change campaign which also includes the distribution of Information, Education and Communication (IEC) materials and billboards. The campaign also promotes hand washing behaviours to community members.

**1.13 Accessibility of food in community**

In regard to purchasing food, Tandale has a large wholesale and retail grain and fruit market. The market is accessible to people from various places of the city and is the main source of food supply for the community. The market is used for retail food purchase for household use and for wholesale business people who buys loads of food to distribute to other places.

In the discussion, the group of community leaders reported that not all families can afford to buy various types of food they want although the price is regarded to be low. For many of poor families they can only afford to buy the same type of food which is common to many people, rice and beans or maize flour.

*"I believe they consider getting full because, most of people in Tandale community they do not consider balanced diet because they cannot afford to buy. They only consider getting rid of hunger only. It doesn't mean that they do not know its importance, but economic status is what makes a person to do so, despite having a market with all nutritious food."* - Respondent, Ward Leaders Group

### 1.14 Considerations in food purchasing

During the discussion with a group of men, they mentioned that people consider the quantity of food enough for the family and not the quality. Even though they understand about the required balanced diet. the low-income families face a serious challenge of acquiring nutritious food. Some of the reasons mentioned is unaffordable cost to purchase varieties of food and time used to prepare food.

*In the case of eating nutritious food at home it depend on one's income. Someone with high income may have a balanced diet, that's depends on their income but if one has a low income then he should live in regard to their income. That was what number one talked about. Its rice and beans is what we eat, sometimes we eat vegetables depends on income. When we talk about nutrition, that's probably someone has earned a week's worth of money or a month now they decide to go to the market to buy stuffs and bring them home.* - Respondent, Men's Group 2

*For example, here in Tandale or Mwananyamala, the market is near. You may find rice sold for about 1,600 shillings to 1,200, if you can go there with your 10,000 shillings you can buy a lot. If you feel like having a bit of vegetables you can also buy, there are legumes, beans, grains and the like, it means that if you have 20,000 shillings, it is easy to buy a lot and you be at peace."*

*Big issue in our society is that we eat so as to be full. We will talk a lot around but we get right back here, the issue is about income. For example with 10,000 shillings you can buy a lot but we have other needs too."* - Respondent, Men's Group 2

*Sometimes when I have money I can buy a bunch of bananas so my family can eat fruits. But I can't buy fruits every day."* - Respondent, Men's group 2

Participants admitted that food served in the family is the same to everyone and there is not a distinction between what is eaten by the adults and children. Families only make arrangement to ensure children or the cohorts eat together. For instance, children of the same age would sit and eat together, or a group of men eat differently with a group of women.

Provision of nutrition-related services for adolescent mothers and children is done by the formal government health system through the health centre and outreach programs. In some occasions, the health workers convene meetings with community members especially mothers. Men are only engaged in such discussions when they accompany their spouse as a mandatory requirement for the first visit to the facility. Overall, no specific nutrition consideration is given for non-pregnant and pregnant adolescents.

### 1.15 Management of water, sanitation and hygiene

#### 1.15.1 Cost of water

DAWASA charge around 30,000/-Tsh per month for an average family. However, for those who do not have water pipes in their homes, they buy water from water kiosks and water points. One bucket of 20 liters costs between 50 – 100/-Tsh. Water is available a few meters from every home and accessed at all the times

unless there is a water cut by the authorities. In time of water scarcity, the prices rise. Many families treat water by boiling or using water treatment drugs known as Water-Guard. Families avoid water contamination by separating the buckets of drinking water with other utensils.

### 1.15.2 Types of latrines

Most interviewers admitted that households in Tandale uses pit latrines which were partly modernized. They use the Asian type of toilet sinks to avoid people seeing the faeces directly and uses little water to flush the toilets after use. Participants stated that open pit toilets usually are not good and using the Asian type maintains the sanitation and avoids direct contact with faeces.

The habit of emptying the toilets have a direct influence on infections. Normally people would wait for the rain season to empty their toilets. Toilet chambers are left open when it is raining and sewage is fled down the water streams. Rain water and sewage mixes together to the extent that diarrhea and cholera outbreaks are common during that time.

*"…. There is a large possibility for example the flowing water causes cholera."* - Respondent, Adolescent Group 1

*"In the area with concentration of houses, where you build your kitchen someone else builds toilets, the outbreak of communicable diseases such as cholera is common* - Respondent, Adolescent Group 1

*"Dangers exist if citizens will be outflowing wastewater instead of sucking it. There is contamination and diseases such as dysentery, cholera, typhoid, and so on will exist"* - Key Informant Interviews

*"In Tandale floods do happen. When it happen, you could probably vacate the place since you find faeces floating around. You see? .....it is during floods when the outbreaks occur, diarrhea, cholera are the most common disease. You see? Because the sewage waste comes out, you know why? Because the houses are cramped here and there."* - Respondent, Women's Group 2

### 1.15.3 Waste drainage.

The government constructed trenches for drainage, but due to the nature of houses i.e. congestion in most areas, there is limited access to a drainage system. Garbage is collected by the government from collection points, and households pay for this service. It is a duty of the local government to collect garbage and collection fees every month. However, there are several occasions that piles of garbage are abandoned for several days and the community members note this as the authorities' negligence.

*"We are paying for the service, but sometimes the trucks are not coming for days."*

## 1.16 Economic and income-generating activities that community members do, whether formal or informal

The large percentage of household economic activities were run by women in the form of food vending known as *Mama Ntilie* (cooking and selling food). Men usually engage in craftsmanship, carpentry, tailoring, etc. Normally people have other income generating activities as a supplementary way to increase

and sustain their household income. Some of them were employed in formal sectors of professional employment like teachers, nurses or work in industries and offices but still have income generating projects.

Men and women do the same activities and there was no segregation regarding the kind of activities done by men and women. Men also were engaged in food vending but to a lesser extent.

*"The mother becomes may be a civil servant, and the father is at home or a carpenter, so the mother may have a higher income than the father or they may be equal. So, saying that there is a special job for a man that is no longer the case even if it is, then soon this tradition will no longer exist."* - Social Welfare Officer

The tradition that prohibited women to work or only engage in some chosen activities has changed. The hardship of life has caused people to consider and appreciate that anyone can do the same activities as long as these activities are within their capacity and contribute greatly to their development and the well-being of their family. It is normal now for a woman to earn substantial income compared to her husband. Men are likely to understand that things have changed over the time and that both a wife and a husband should work to support the family income. Having more women in business industry is a credit but it threatens the nutrition and health wellbeing's of children under-five years due to lack of care and support. Women wake up early in the morning in some cases around 3 am in the morning. In Tandale area, women either have to go to the fishing market at Ferry area to buy fish or to the meat market in Vingunguti (a large meat slaughtering area). They had to wake up early in the morning and return to Tandale to prepare food in their small restaurants.

Women do not have enough time to prepare meals for the families or adequately follow up with what is happening to their children. Normally they prepare porridge or any simple quick meal for their children and family members. Not only are children's nutrition status affected but also their welfare and safety are put at risk since most of gender-based violence occurs at home and mostly perpetrated by people close to the families. For instance, a Municipal Social Welfare Officer reported that they received cases of child abuse and gender-based/domestic violence including rape occuring at homes.

*"There are cases of rape. Children are raped in homes or even at schools. People who are left with children are the perpetrators"* – Key Informant Interviews, Municipal Social Welfare Officer

**1.17: Mapping of stakeholders and services in Tandale.**

The community mapping exercise was conducted by the community members during a validation meeting which included two representatives from each FGD. In the exercise, community members were asked to draw a map of Tandale and identify services available and stakeholders working in the area. The map below shows services and the list of stakeholders. A complete list can be found in the Appendix.

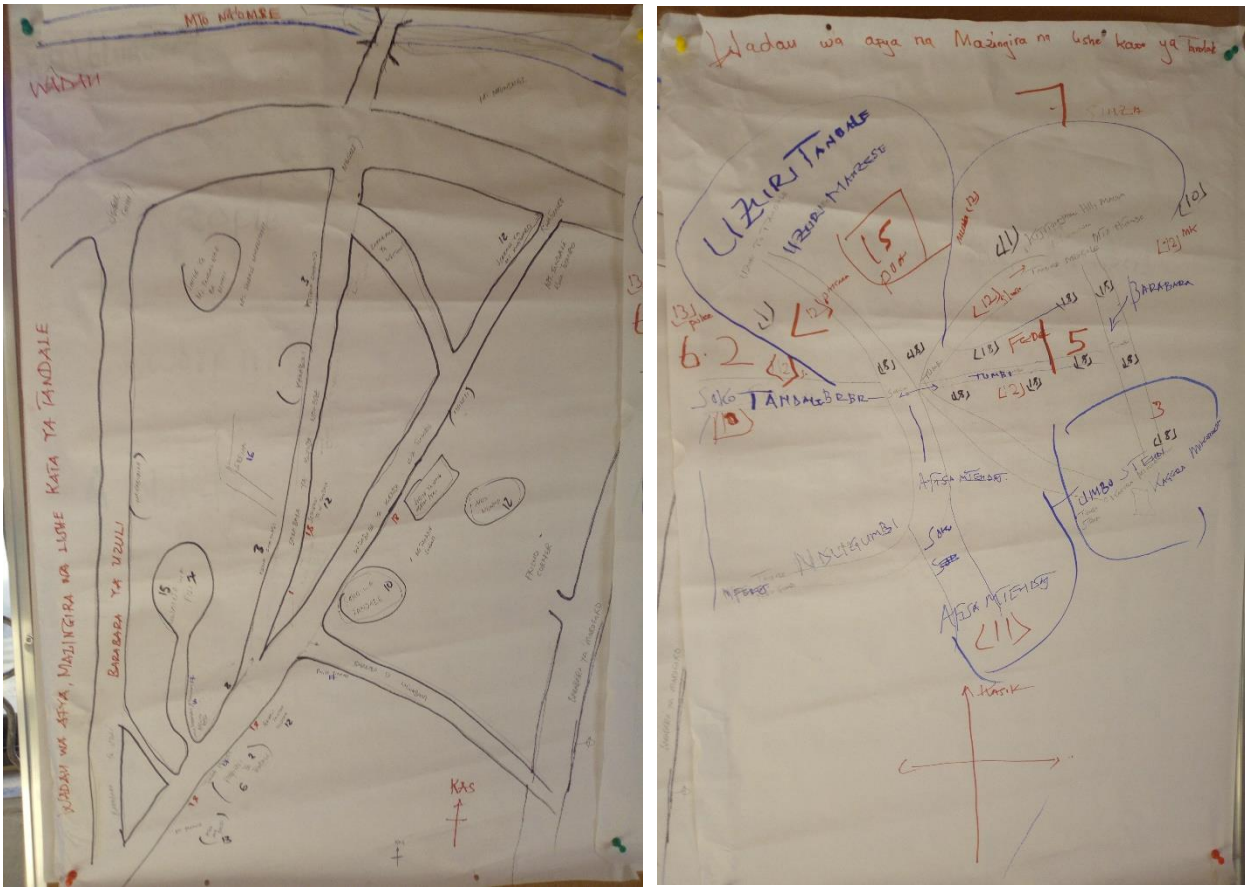

**Figure 1: Description of stakeholders identified in Tandale during mapping exercise**

### 1.18 Conclusion

**NUTRITION:** No specific stakeholders implementing nutrition interventions were identified in Tandale, however nutrition education is provided at the health facilities during RCH services. Respondents indicated a reasonable understanding of infant and young child feeding practices and the concept of a balanced diet but issues related to time, maternal engagement in small business, perception about inadequacy of breastmilk and low purchasing power jeopardised the effort to improve IYCF practices.

**WASH:** The supply of piped water and improved wells was said to be adequate. However, the respondents identified liability during water connection, payment of water bills, leakage of water pipes, contamination and excessive fluoridation which affect the odour of water as main barriers. In addition, participants reported to have poor/low connection with a drainage system and limited facilities for garbage collection.

**HEALTH:** Tandale is predominantly served by one government health facility and with minority being served in private facilities. Issues related to long waiting time and unfriendly services from the government facility was strongly pronounced. The services offered in private facilities was said to be better, friendlier,

and with less waiting time. Both private and government facilities were reported to provide same RCH services.

### 1.19 Recommendation

Due to the nutrition, health and WASH vulnerabilities which negatively impact the health status of the people living in Tandale slums, the Government and development partners should design and implement integrated interventions addressing nutrition, Health and WASH challenges in slums.

### 1.20 Pictures taken during case study data collection

***Picture 1. Data collection team***

***Picture 2: Registration process***

***Picture 3: Data collector giving overview of work***

***Picture 4. Focus group discussion with fathers having children under two years old.***


***Picture No. 5: Discussion with Adolescents male and females***

***Picture No. 6: Focus group discussion with mothers having children under two years***

***Picture 7: Focus Group Discussion with Tandale leaders***

***Picture No.8: Validation meeting members closing their eyes to think loud about services around Tandale***

*Appendix A. List of stakeholders from the community mapping exercise*

**Tanzania Urban Poor Federation (TUPF)**
TUPF is a member of the Slum Dwellers International, which is a network of small urban poor community groups living in informal settlements that formed a national urban poor federation of Tanzania. It implements slum upgrading programs and formation of savings and economic groups.

**Tandale Health Centre**
Tandale Health Centre is a government health facility which serves the population of 54,781 according to National Census 2012. The majority of Tandale residents from the six sub-sets which forms the ward, uses the health facility. The facility offers both in-patient and out-patient health services including reproductive and child health services.

**DAWASA**
Dar es Salaam Water and Sewage Authority is the public authority with a mandate of supplying water services and removal of sewage products in Dar es Salaam region and part of coastal Region (Kibaha and Bagamoyo). DAWASA implement Maji Yetu project in Tandale and other 14 peri-urban settlements of Dara es Salaam to improve living conditions through provision of clean, safe and reliable water supply and sanitation facilities in a sustainable manner.

**TASAF**
Tanzania Social Action Fund (TASAF) established by the government of Tanzania to enable poor households to increase incomes and opportunities while improving consumption. TASAF is a government of Tanzania funding facility organization that provides a mechanism that will allow local and village governments to respond to community demands for interventions that will contribute to the attainments of sustainable development goals. The organization is supporting poor households through cash transfers and helping them to be self-reliant in the long run.

**Tanzania Red Cross Society (TRCS)**
TRCS is a disaster preparedness organization which aims to improve the situation of most vulnerable in Tanzania through the power of humanity. The organization has implemented a program in Tandale which its residents are the victims of floods during the pounding rain in Dar es Salaam. TRCS has extended cash response humanitarian aid for the affected families to enable them re-establish after the floods.

**Tandale Youth Development Center (TYDC)**
TYDC is a grassroots organization that offers reproductive health education as well as counselling services, peer education on health issues, awareness raising and sensitization on hygiene, water and sanitation, and waste management. The organisation is collaborating with local service providers in supporting HIV counselling, testing and treatment of HIV and other STIs. TYDC works in Tandale, Dar es Salaam.

**TAMWA**
Tanzania Media Women's Association (TAMWA) is a non-governmental and human rights organization aiming to advocate for women and children's rights by conducting awareness raising activities for

cultural, policy and legal transformations in the society through the use of media. TAMWA is running a project in Tandale to create family planning public awareness education program to members of saving groups popularly known as Village Community Banks (VICOBA) in efforts to fight maternal death and improve lives. The project consist of usage of modern contraceptive methods for sustainable development.

**JHPIEGO**

Jhpiego is leading 'Sauti Project' in collaboration with the government of Tanzania to roll out comprehensive, integrated packages of client and community-cantered biomedical, behavioural and structural HIV prevention, family planning and escorted referrals to health care treatment for key and vulnerable populations. They operate in Tandale and other parts of Dar es Salaam and 13 other regions. The project is forming a powerful community worker/counsellor teams that walk door to door in the suburbs, providing HIV prevention services to clients in their homes.

**Tandale Food Market**

Tandale food market is located within the ward but is serving the neighbouring communities of Sinza, Manzese, Ubungo and other parts of the city. It is the main source of food purchasing and a business centre for many of the residents.

**The Office of Local Government Authority (LGA)**

LGA is a government administrative office which has a direct contact with the community. It is led by Ward Executive Officer who is supported by extension officers from different departments including social welfare, health, education and security.

**Hyena Ground.**

Uwanja wa Fisi (hyenas ground) is an open ground surrounded by residential houses, brothels and bars, a famous hotspot for sex work, alcohol and drugs in Tandale. The place is operating 24 hours despite the government attempts to close the place, but all effort bore unfruitful results. Many NGOs have been implementing projects targeting key population for HIV/AIDS and drugs interventions.

**List of pharmacy stores**

- Tandale Pharmacy
- Faidi

**Private dispensaries**

- Sibena
- JJ
- Taima
- Bakwata
- MIKO