

# The Contribution of Streetscape Elements on Livelihood Activities in Central Business District

## (The Case of Dodoma City)

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**Abstract:-** This paper has provided descriptive information on the link between Streetscape elements or the physical characteristics of streets found within the streets in Central Business District (CBD). Livelihood activities on various streets types including Commercial, Institutional and Mixed-use streets within CBD have been linked with the existing streetscape respectively. From three streets under the study, the streetscape elements that were used to study the link between Streetscape elements and livelihood activities include the paved walkways, drainage channels, advertisement boards, trash receptacles, streetlights, street trees, signage, traffic lights, bollards, fence, parking, facades, road mark and bus stop. The methodology includes the use of case study research approach, and data was collected using literatures, official interviews, inventory and interview with street users. The research findings indicate that there is strong relationship between streetscape elements and livelihood activities establishments and operation within inner urban streets from time to time. Despite strong relationship represented on the study findings, still the extent has also been different from one element to the other with street pedestrian walkways being on the lead.

**Keywords:-** Streetscape Elements, Livelihood Activities, Inner Cities.

### I. INTRODUCTION

Urban streetscape elements have been used to describe the natural and built fabric of the street and depict the design quality of the street and its visual effect as programs to improve street conditions on the road cross section, traffic management, sidewalk conditions, landscaping (particularly tree cover), street furniture (utility poles, benches, and garbage cans), building fronts, and materials specifications (America Institute of Graphic Arts-AIGA, 2005). Urban streets in developed countries enhance distinctiveness, social interactions, walking and cycling (Toth, 2009). Cities represent one of the most profound modifications of the Earth's surface, and at some point, in the early part of this century, more people will live in cities than in rural environments (Lance et al, 2014).

Livelihood include the 'capabilities, assets (including both material and social resources) and activities required for a means of living' as defined before by Chambers and Conway, (1992). The core of the urban livelihoods approach is the concept of increasing security, defined as the ability to recover from shocks and stresses and to maintain and enhance capabilities and assets (Rakodi 2002). Human assets, especially labour activities, are considered the most

important livelihood assets for urban residents and this is to mean that, livelihood strategies take heed of building strategies, income-generating strategies and access to basic services as well as gender equity and mobility (Meikle 2002).

In developing countries, urban streets have slowly been considered as places where people need to work, shop, meet and engage in different social, recreational and economic activities (Dumbaugh, 2005). This is linked with the way Urban Street value continues to be determined by the way it encourages community interaction and exchange (El-Shimy, 2016). The continuous practice on urban street design is not only based on the flow of goods and people as aspects on accessibility but maximizing thinking and design on how the interaction will be friendly encouraged (Hart, 2015). This field of study examines social and economic factors to better understanding on how the combination of both influences better livelihood interaction (Gehl, 2010).

Currently, in Tanzania Urban design is become more live and amongst of its seven elements street falls within where, Social sustainability encompasses notions of equity, empowerment, accessibility, participation, sharing, cultural identity, and institutional stability. The good thing about many Towns in Tanzania including Dodoma are spatially controlled with the aim of attaining sustainable development through provisions of plans that follow planning laws, policies and guidelines as a part of the legal frameworks (Dodoma National Capital City, 2010). In urban areas like Dar es Salaam City, some streets have been pedestrianized to accommodate more people, some have been converted from one way to two ways for similar reasons, and still in some cases buildings have been brought down to allow for road expansion (JICA, 2008).

According to Pune Municipal Corporation (2016), the typology defines the street with specific usage and purpose. Streets may have similar ROW but different functions, different land use and thus different design requirements although it can happen that streets may have common streetscape elements (NACTO, 2012). The following are street elements as they were discussed;

**Footpath;** Footpath or side walk is a portion of the street reserved only for pedestrians. It is provided on both edges of the street (Pune Municipal Corporation, 2016). Good foot paths are the most essential components of any good street in the city (NACTO, 2012). Attributes of good footpath design include; accessibility by all users on livelihood activities, continuity and connectivity and adjoining landscaping to create a buffer space between pedestrians and vehicles and also provide shade for

convenient working environment on daily livelihoods (Lukenangula, 2017).

**Cycle track;** Cycle tracks are reserved portion of the street only for cyclists. These are essential components of wide streets which safe guard cyclists from fast moving vehicles and encourage the use of cycles. Cycle tracks should have adequate clearances from the bollards plantation, parking areas for car door opening and street furniture. Lastly Dedicated parking spaces with well-designed cycle stands are provided for cycles near transit stations and within off street parking in commercial areas that portrays urban livelihoods(Pune Municipal Corporation, 2016).

- **Bus stops;** Bus stops are one of the essential component of streets with the following designing essentials; have provision for display of route in fo maps, digital sign boards apart from advertisement boards (Pune Municipal Corporation, 2016). The displays and advertisement boards should be placed on bus stop such that they are perpendicular to pedestrian and vehicular movement and not at the backside of the stop, because then it creates an opaque space behind the bus stop, which pedestrians do not use (Carmona 2014). Bus stops always have emergency phone numbers or police help line numbers to assist the users in security matters (Pune Municipal Corporation, 2016).
- **Carriageway;** Carriage way is there served portion of the street only form oving vehicles. It needs to be well defined and demarcated with lane markings. It is divided by railing or median o run divided depending on ROW forto-fro traffic movement. Carriage ways are not to be used for parking, hawking, walking and laying utilities (NACTO, 2012). Carriage way on any street has to be demarcated with yellow colour lines and reflective cats eye on them. Internal lanes have to be marked in white colour dashed lines. Shoulder are designed by being given proper outward slope for efficient draining of surface water from carriageway(Pune Municipal Corporation, 2016).
- **On street parking;** 2-wheelers and cars are most common private vehicles parked on street. Autos, cabs, school buses are public and semi-publicvehicles consuming road space for parking. Municipals are responsible for the provision and it is not the right of individuals. In central areas, street parking may be permitted on one side of the road one day and on another side on another day depending on the site location. The scales at which urban form can be considered or measured include the individual building, street, urban block, neighbourhood and city (Carmona 2014).These levels of spatial disaggregation influence how urban form is measured, analysed and ultimately understood (Williams et al, 2000).

#### A. Streetscape elements and environmental values

Landscape and planting materials both movable and immovable planters, Trash and recycling are discussed to be part of streetscape elements that have largely influence of promoting environmental values on urban streets and improve aesthetic values (Frui, 2014).Protection from hot sun, cold winds and rain, restore natural systems, and planting trees have been discussed to be the environmental

values on streets while performing livelihood activities (Elshimy et al, 2016).

#### B. Streetscape elements and imageability

Since the emphasis has been on street physical qualities, this leads to the definition of what might be called imageability; that quality in a physical object which gives it a high probability of evoking a strong image in any given observer. It might also be called legibility, or perhaps visibility in a heightened sense, where objects are not only able to be seen, but are presented sharply and intensely to the senses (Lynch, 1960).

A place for livelihood activities has been considered to have high imageability when specific physical elements and their arrangement capture attention, evoke feelings, and create a lasting impression (Lynch, 1960).Streets filled with people, many signs, and strong landmarks make the City a very imageable place while few pedestrians, inadequate livelihood activities, and no features that serve as landmarks make these streets hardly distinguishable from others and thus not imageable. People form mental images or representations of cities based upon key legible features such as key landmarks and transport networks (Circa, 2011).These images influence the people's views about the desirability of different areas within cities for livelihoods functions (Clemente, 2005).

The great concern is on the translation of investments into walkways, bikeways, railways and roadways as they create jobs, encourage urban livelihood expansion and increase economic output (UN-HABITAT, 2013).A livelihood is exposed to include capabilities, assets (stores, resources, claims and access) and activities required for a means of living and cope with and recover from stress and shocks, maintain or enhance its capabilities and assets, and provide sustainable opportunities for the next generation; and which contributes net benefits to the economy in the short and long term(Chambers & Conway, 1992).

Differentiation on livelihood involves relative well-being or it may focus on issues such as gender, age or ethnicity (Coad et al, 2008).It can also help us to understand where resistance may develop, if for example activities threaten certain groups within the community as it relates with determinants of beneficial livelihood outcomes which include; adaptive, collaborative, and integrated management, enabling and supportive policies, legislation, institutions, governments, and markets, equitable distribution of benefit across genders, ages, classes and ethnic groups, Broad community participation and stakeholder involvement in development processes, Enabling environments for entrepreneurial development as well as Empowerment and capacity (Coad et al, 2008).

In 2015, Grigor Doytchinov, Aleksandra Dukic and Catalina Ionita acknowledged that, the modernity is highly enhanced in capital cities by modern city planning, streets and (street) lighting, running water and sanitation in larger buildings and transport connections which depicts the presence of street major components which are activities, people and access. The need of expanding our culture, reputation and services is highly encouraged to be in a

global level perspective (**Doytchinov et al, 2015**). This creates a competitive arena for the cities in order to attract the visitors, investors and future citizens who tend to find a harmonious place where various aspects of the benefits, economic development and political stability can meet their individual needs and requirements (**Babere, 2015**).

It has been acknowledged that the good and quality street encompasses characters like being clean and well maintained, pedestrian and vehicular accessibility, well-lit and safe, good attraction and associated activities, sensitive alteration and quality landscape, pedestrian harmony, comfortability and human attractive and distinctive while the vice versa likes to result into negative values (**Carmona, 2014**). Streetscape should be inclusive by accommodating different groups of users who will translate the design products, services and environment into their daily life interactions (**Burton, 2006**). In this literature, Hierarchy, distinctiveness, comfort, safety and connectivity are also explained to be part of priorities on streetscape (**Burton, 2006**). In other words, streets have been explained to accommodate the safety factors, smooth and convenient movement, cleanliness measure, comfort, attractiveness and the promotion of green environment as to reduce the impact on the natural and built up environment (**Pune Municipal Corporation, 2016**).

It is strongly argued that; Streets account for about 80% of public space in urban areas and provide the setting for billions of pounds worth of property (**Telford, 2002**). Streets are shown to touch the attitudes and perceptions of society. In extension to those attitudes and perception of society, Street are used for many things by many ways and by different people (**Marshall, 2005**). The focus to date has been on productive activities, buildings and physical access to buildings as they all base on provision of equal access and opportunities to the street users despite of their social and economic differences (**Burton, 2006**). The belief is that, many activities that are taking place on streets are informal ones and are exercised at large competition (**Babere, 2015**). Street Partnerships reinforce the role of the street as a basic unit of democracy with potential for livelihood activities progress and environmental action, encouraging social support networks and strengthening the community (**Telford, 2002**).

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The Link has been made with Integrative theory of Urban design (**Sternberg, 2000**) and livelihood concept (**Chambers and Conway, 1992**). The livelihood concept is traced back in 1992 as it was introduced by Chambers and Conway. The link has been made to include capabilities, assets and livelihood activities as a sustainable livelihood approach towards poverty alleviation and make the coming generation to recover from stress and shocks and expand more opportunities in local and global levels for short and long-term basis (**Chambers and Conway, 1992**).

## II. METHODOLOGY

The study involved the use of case study research approach where, data have been collected by use of different methods of data collections including interviews, observations and checklist. Three streets in the inner city to cover Commercial use, Institutional function and Mixed-use function were selected for adequate data collection convenient to make comparative study under respective sample (79 street users interview forms). Data that was needed was the link between streetscape elements and livelihood activities on inner cities, where the data were collected using multiple tools and methods of data collection as to cover exhaustive literature review on urban streets and livelihood activities, street inventory forms to assess the physical design of the CBD inner streets and the livelihood activities accommodated within, official interview using official checklist, street users interview with interview forms to gather their views on the contribution of streetscape elements on their livelihood activities, camera to capture the design image of the inner streets and corresponding livelihood activities, and GPS.



**III. RESULTS**

*A. The link of streetscape elements and livelihoods activities in Urban streets within CBD*

Literally, Livelihood activities are linked on poverty alleviation both short term and long terms purposes and therefore individuals are expected to work under conducive

environment of their choice as to work for a living (El-Shimy, 2016). The study identified that, street users have been influenced differently from the streetscape elements as far as the link to the establishment of livelihood activities is applied with reasons being shows on the table 1.

SNo	Streetscape elements	Commercial street	Institutional	Mixed use
01	<i>Paved walkways</i>	Areas to support customers and businessmen	Areas to support office workers, businessmen and customers	Areas to support office workers, businessmen and customers
02	<i>Drainage</i>	Control of flood in working areas	Control of flood in working areas	Control of flood in working areas
03	<i>Street benches</i>	Resting place for customers and businessmen	Resting place for customers and businessmen	Resting place for customers and businessmen
04	<i>Advertisement boards</i>	Attract business customers	Attract service and business customers	Attract service and business customers
05	<i>Trash receptacles</i>	Clean working environment	Clean working environment	Clean working environment
06	<i>Streetlights</i>	Safety and security on working place More working hours	Safety and security	Safety and security on working place More working hours
07	<i>Street trees</i>	Ecological support on working areas (shades and air quality)	Ecological support on working areas (shades and air quality)	Ecological support on working areas (shades and air quality)
08	<i>Signage</i>	Safety and control of use congestion	Safety and control of use congestion	Safety and control of use congestion
09	<i>Parking</i>	Control congestion	Control congestion	Control congestion and safety
10	<i>Bus stop</i>	Bringing in customers and businessmen	Bringing in customers, businessmen and office workers	Bringing in customers, businessmen and office workers
11	<i>Street name</i>	Street recognition by customers	Street recognition by customers	Street recognition by customers
12	<i>Street mark</i>	Control space use	Control space use	Control space use

Table 1: The significance of streetscape elements on livelihood activities within CBD

Source: Field work, 2019

➤ *Link of Street Paved walkway on established livelihood activities*

To start with paved walkway, those conducting livelihood activities in Institutional and Mixed-use streets have been highly influenced by the paved walkways by equal chance as from the respondent. 95 percent declared that paved walkways has been largely attracting their

customers to consume services within and it has been also a friendly environment for them to walk within as well. This is unlike to the Commercial street where the part has also been encroached by the businessmen themselves putting their commodities for easily visibility for all users following the challenge of parking that hinders visibility of what they offer from within their mini-commercial spaces.



Plate 1: Street paved walkway

Source: Field work, 2019

➤ *Link of Street Drainage channels on established livelihood activities*

The drainage had highly influenced people to conduct livelihood activities by giving equal weight for the Commercial Street and Mixed-use Street by 55 percent each. This followed the friendly environment for them to conduct their daily activities in an area where the flood control has

been considered. It has been unlike to the Institutional street where the drainage channels are not designated and thus the existence of natural drainage gully made the part of the 50 percentage of respondent to acknowledge the advantage of its presence over the flood control for them to conduct their livelihood activities safely and in an attractive environment.



Plate 2: Street closed drainage channel

Source: Field work, 2019

➤ *Link of Street benches on established livelihood activities*

The existence of self-installed street benches in Mwangaza Commercial Street has attracted the businessmen by 47 percentage of the respondent acknowledge the significance of them on socializing especially during evening moments when taking coffee. Also, some of the businessmen who engage in shoe making have acknowledge that the street benches have aid the customers to wait for their shoes while being mend. This is unlike to the two remaining streets where the street benches are absence and thus strongly no single respondent showed to be attracted before for the establishment of the livelihood activities.

➤ *Link of Street Advertisement boards on established livelihood activities*

These have appeared to have great influence for the street users to conduct livelihood activities in Mwangaza Commercial Street. This followed 53 percent of the respondent to acknowledge that they have been attracted from them to run their livelihood activities in a way that capture their customers easily. This is centrally to the rest of the street, Institutional and Mixed-use street where the attraction to the users is less by 30 percent of the respondents from each agreeing and the rest disagreeing. This shows that design and activity nature in Business Street make it become busy and more vibrancy on the livelihood performance.



Plate 4.3: Street advertisement board

Source: Field work, 2019

*B. Link of Street Trash receptacles on established livelihood activities*

These elements appear to have great influence for established livelihood activities in Commercial Street and Mixed-Use Street by 74 and 65 percent respectively. These parts of users believed the clean environment could have brought about comfortable and attractive environment for livelihood activities to become more productive by customers and businessmen themselves. This is unlike to the

Institutional street where the nature of land use with inadequate provision of trash receptacles has made less influence by the users to think on their values towards their livelihood activities as only 65 percent as part of the respondent disagreed being influenced at the time they were establishing the livelihood activities within. The study come to the discovery that the more the commercial activities within the more the need of the attraction of the livelihood activities under the presence of trash receptacles.



Plate 4: Street trash receptacles

Source: Field work, 2019

*C. Link of Streetlights on established livelihood activities*

With Streetlights, the study has identified that, the attraction of those performing livelihood activities to the institutional and mixed-use street is more as 70 percent of the respondents on the two streets have been influenced by their presence on streets. This is different from the commercial street where livelihood activities are performed

mostly to 6 pm where the streetlights have less influence as strongly 97 disagreed being influenced the moment they established their livelihood activities. This shows that the link of residence origin and working hours have pressed the users to look on the alternative influence on streetscape elements like such which attract many customers like pedestrian walkways.



Plate 5: Streetlights

Source: Field work, 2019



*D. Link of Street trees on established livelihood activities*

These had a profound influence on the livelihood activities established in Institutional Street and Commercial Street as the part of the respondents for these agreed by 80 and 71 percent respectively while the users within mixed use responded less on the influence of the street trees on their

livelihood activities by only 10 percent agreeing on it. The largest response on the Institutional street was on the significance of these trees to the vendors who claimed to benefit from the shade but also, they often use for hanging some goods including clothes.



Plate 6: Street trees

Source: Field work, 2019

*E. Link of Street Signage on established livelihood activities*

Recognition of Signage to have positive contribution to the livelihood activities at start has been identified to have major influence on the commercial and institutional streets by 74 and 70 percent respectively. Unlike to Mixed use street where users had confidently thought on the other

elements instead as the street being the highway one, made them be sure on the availability of signage for safety and security of traffic movements within thus attraction on this was disagreed by respondent by 75 percent while the rest positively acknowledged.



Plate 7: Street signage

Source: Field work, 2019

*F. Link of Street Parking on established livelihood activities*

In mixed-use highway street has been a major influence for those who work within think on the easy way to which customers will easily be obtained and easy way to which motor users could park and conduct livelihood activities friendlier. Respondent agreed by 50 percent that they have been influenced by the presence of parking spaces. This is unlike to the rest of the streets where the respondent has nearly provided equal weight of 5 percent while the rest

disagreeing. In institutional street the parking spaces are found in one part only as per observation to which has highly contributed to the small response of the users being influenced instead, they have been influenced with other adequate streetscape elements found within. The low response on the commercial street by large percentage is because the street has been so busy on commercial activities and thus users expected to conduct activities to a street that offers more non-motorized users than motorized ones.



Plate 8: Street parking

Source: Field work, 2019

#### *G. Link of Street Bus stops on established livelihood activities*

With Bus stops the study shows that the greater influence for the people to conduct livelihood activities has been on the Commercial Street and Mixed-use Street by 71 and 65 respectively. The bus stops near Mwangaza Commercial Street and the one found in Nyerere Highway Street have been bringing in street users who are businessmen and customers easily. This signifies that the two largest parts of response by the users within Commercial and Mixed-use streets have been due to the fact that, they looked for the easiest way to which customers who are users of public

transport get into streets easily and make consumption of goods and services being offered hence improving friendly environment for them to conduct their livelihood activities. This is contrary to the institutional street which has little attraction by 90 percent of the respondents disagreeing on it. Thus, this signifies that the extent to which design influence performance of livelihood activities in relation to existence of Bus stops within could highly be influenced by the nature of land use within. Furthermore, the number of private motorized users on street also can influence the existence of bus stops to be in high demand or not.



Plate 9: Street bus stop

Source: Field work, 2019

#### *H. Link of Street names on established livelihood activities*

With street names, the study shows that, the greater influence on the influence of the livelihood activities has been to the institutional street where respondent part agreed on it by 95 percent. This is because the street has been famous by the name twelve road. despite institutional services which are dominant as the land use purpose of the street has been set from the plan, this part has been famous for perk selling thus street users have highly attracted to

perform their livelihood activities within following the street being known by many users. This signifies the greater the legibility influence of streets on livelihood activities on path element than the rest of the streets which have been less influence by 3 and 45 percent for the commercial and mixed-use streets respectively. To the design it shows that despite the position of the street function still the history plays a great role on the design functionality to make legibility influence establishment of the livelihood activities.





Plate 10: Street name

Source: Field work, 2019

*I. Link of Street mark on established livelihood activities*

The study came out with identification of little influence on people to think on the value of Street mark towards establishment of their livelihood activities as to the three street responses from the users have been 3, 0 and 5 percent for the commercial street, Institutional Street and mixed-use street respectively. Following that street marks have been very important on the demarcation of the space use in a street section design, the response from the three streets

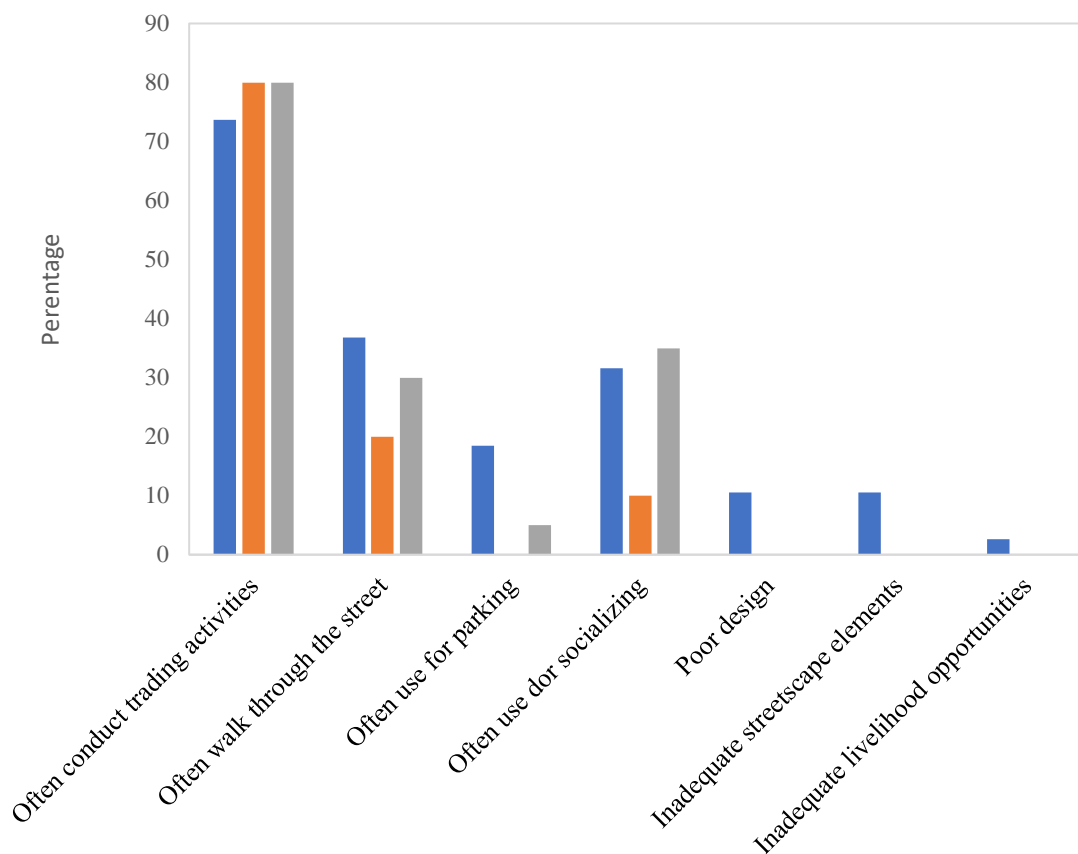
shows little knowledge on how useful these elements has been of much value to their livelihood activities as to avoid unnecessary competition on space uses as it is happening currently. The following table 4.2 comes out with the summary information of attraction that appeared as the influence towards street users to initiate their livelihood activities within Commercial Street, Institutional Street and Mixed-Use Street respectively.

Table 2: Interrelationship of streetscape elements with establishment of livelihood activities in Commercial, Institutional and Mixed-use street within CBD

SNo	Streetscape elements	Commercial street				Institutional				Mixed use			
		YES		NO		YES		NO		YES		NO	
		no	%	no	%	no	%	no	%	no	%	no	%
01	Paved walkways	28	74	10	26	19	95	1	5	19	95	1	5
02	Drainage	21	55	17	45	10	50	10	50	11	55	9	45
03	Street benches	18	47	20	53	0	0	20	100	0	0	20	100
04	Advertisement boards	20	53	18	47	6	30	14	70	6	30	14	70
05	Trash receptacles	28	74	10	26	9	45	11	55	13	65	7	35
06	Streetlights	1	3	37	97	14	70	6	30	14	70	6	30
07	Street trees	27	71	11	29	16	80	4	20	2	10	18	90
08	Signage	28	74	10	26	14	70	6	30	5	25	15	75
09	Parking	2	5	36	95	1	5	19	95	10	50	10	50
10	Bus stop	27	71	11	29	2	10	18	90	13	65	7	35
11	Street name	2	5	36	95	19	95	1	5	9	45	11	55
12	Street mark	1	3	37	97	0	0	20	100	1	5	19	95

Source: Field work, 2019

The study goes further showing that, users can sometimes become attracted to conduct livelihood activities on the street of their choice following the existence of certain streetscape elements from which one is attracted.



➤ *Performance of livelihood activities*

From the literatures the need on change on the streetscape had been impacting positively on the development of livelihood activities from time to time (Pune Municipal Corporation, 2016).The study has shown that, the contribution of the livelihood activities on streets collectively by the user performance on their daily

livelihood activities has been recorded by the Dodoma Municipal to rise from time to time. The table 4.4 below shows the revenue collection from the livelihood activities for year 2015 to 2019 expectations. The management on livelihood activities and the contribution to the revenue collection has been in positively contributing to the Municipal development.

Table 4: Performance of livelihood activities

Year	Estimated amount	Real amount collected
2015/2016	4,566,075,181	3,665,699,279
2016/2017	3,938,132,295	4,363,649,525
2017/2018	20,798,203,295	25,111,427,211
2018/2019	68,643,237	-

Source: Field work, 2019

The data when plotted linearly they show that, the streetscape link to livelihood activities operations in revenue collection has been in a direct proportional to the design period existence (time).

**IV. DISCUSSION**

This section provides brief description of the common characteristics found on the Urban streets within CBD including Commercial street, Institutional street and Mixed-use street and bringing up the summary on the emerged common issues on the link of streetscape elements to the livelihood of the street users.

*A. Streetscape elements within the CBD*

Literatures on urban street design argued on different street design but with some common streetscape elements provision on daily livelihood activities Pune Municipal Corporation (2016).Across the cases, the study has identified the presence of common streetscape elements to which they have been one amongst the factors influencing the establishment and performance of livelihood activities. This is to include the provision of side walkways, drainage channels, street lights, street trees, street names, parking, signage, Electric poles and telephone poles. This signifies the common need within Commercial streets, Institutional streets and Mixed-use street despite the difference in street sizes and accommodation of livelihood activities by their physical attractions in design performance as it was also

argued by National Association of City Transportation Officials (NACTO) in 2012. The major common issue identified on streetscape elements is on the poor maintenance of the existing ones.

#### B. Livelihood activities on inner Urban streets

Literature showed the urban streets has user diversity who also bring about livelihood diversity (Coad et al, 2008). Across the cases, the study findings revealed the existence of some common livelihood activities which covers the presence of transport livelihood activities, mini-commercial shops livelihood activities, and street vendors. The issues under the presence of these livelihood activities in urban street has been on the space use competition that has largely pose misunderstanding amongst mini-commercial space operators and street vendors who are currently being allowed to accommodate available space within Urban streets after they pay 12000 Shillings as annual fee for their livelihood activities operation. Literally, it was further discussed that urban streets have been in continuous space use competition for livelihood activities and informal livelihoods being a big concern (Babere, 2015). From the study findings, space use competition continued to be shown as a common point of embark towards space use control on urban streets with proper management of existing streetscape elements and those in demand from time to time and ensure convenient environment over livelihood activities operations.

#### C. Contribution of streetscape elements on livelihood activities within inner Urban streets

Contribution of streetscape elements is positively to all streets despite the difference on the level of significance from the individual perspectives and this concur with the provision of streetscape elements by the **Pune Municipal Corporation (2016)**. Major streetscape elements with huge contribution have been analyse to be Pedestrian walkways where Urban street users take domination. This too match the discussion made early by **John Lukenangula (2017)**, where inner urban streets were shown to be highly occupied by pedestrian movements on daily livelihoods. From pedestrians the section of customers in livelihood activities has been a part and the inclusion of some businessmen both Mini-commercial space operators and street vendors. The major challenge on the enhancement of the contribution of streetscape elements on the livelihood of the people include the poor maintenance of the existing ones to function effectively all the time which has resulted into theft, increased competition on well design ed streets and continuous competition on the livelihood opportunities.

Currently the streetscape of the CBD makes great link of livelihood activities with 11 streetscape elements as to include the paved walkways, drainage channels, advertisement boards, trash receptacles, street trees, signage, Bus stops, Parking, Ramp, electric poles and streetlights. Further it shows that, the attraction may change from time to time depending on the livelihood activities as it has been traced in the streetscape transition in Nyerere Mixed-use highway street from the 1974 to the current with a series of changed and accumulated

livelihood activities within. This bring in the achievement of integrative theory of urban design (Sternberg, 2000) with livelihood concept showing significance understanding on the need of Streetscape elements towards positive link on the livelihood activities design and livelihood concept (Chambers and Conway, 1992).

## V. CONCLUSION

The chapter concludes that the existence of streetscape elements in urban streets within CBD has a great contribution to livelihood activities as it appears to attract livelihood activities operators and customers. The physical qualities as to include the varieties and richness on livelihood operation are highly influenced as to cover the success of linkage theory as the link for every element on livelihood activities has been observed differently. This implies that, the position of the shared concept has been considered to make the operation of the livelihood activities being attracted by existence of streetscape elements as perceived differently by all users within Commercial, Institutional and Mixed-use street.

## VI. AREA FOR FURTHER STUDIES

The areas for further research can include the study on the challenges on the existing streetscape elements within Central Business, the contribution of these streetscape elements on livelihood activities to peri urban areas as well as the influence of the street users to the growth of the street livelihoods.

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