

# Claiming the essence of urban leftover spaces through the causes of their formation: The case of Addis Ababa, Ethiopia

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**Abstract**— analyzing the essence of urban leftover spaces helps to understand how land is used efficiently in cities, which has a direct impact on creating communities that offer better choices for where and how people live within a defined form of space. When we look at the concept of how Addis Ababa is configured, it is difficult to find that managed and proper use of urban land because of the presence of leftover spaces, caused by inefficient planning, change in the function of spaces, and geographical constraints. That has a direct effect on the proper use of spaces, the city organization, the cost of infrastructure on the economy, and the aesthetics of the city. So, having this in mind, it is all analyzed through observation, mapping, discussions, interviews, and document reviews and tried to contribute a hint by looking deep down at the substantial nature of urban leftover spaces through causes of formations as a parameter. The study finalized how planning by itself is a cause for spaces wasted in cities.

**Index Terms**— Essence, Land, Urban, Space, Planning, Public space, Resource, and Leftover space



## 1. Introduction

Urbanized areas cover only around 6% of Earth's surface (Meyer and Turner, 1992). According to the UN (report, 2014), 70 % of the world's population will live in urban areas by 2050 with the number of cities expected to exceed 2000 by 2030, compared to 1551 in 2010. At the same time as there are 43 'large cities' with populations between 5 and 10 million in 2014, they are expected to be 63 by 2030. The UN estimates that there will be more than 40 mega-cities worldwide by 2030, each with a population of at least 10 million, compared to 28 today. /UN, 2015/. Addis Ababa will be one of the mega-cities by 2030 because the population is now predicted 7million app. Therefore, what kind of neighborhood do we have now and what kind to build, if we are considered to be one of the cities above, in the world. To that end, any development will depend on the current infrastructure, traditional and cultural desires, topography, financial resources, and the institutional scope for planning and political stability for growth management. As cities expand out across productive arable land, it is important first to investigate the potential value and usage of unused land or leftover spaces in currently developed areas of cities. Utilizing leftover spaces efficiently and productively should be no question phenomenon in the city. For all this, it is primarily important to analyze the substantial nature of urban leftover spaces by understanding their formation, through causes of formation, which will also invite many possibilities for dwellers in the city, mostly on looking into inward and make them focus on efficient use of land.

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## 2. Materials and methods

**Researches question:** What is the substantial nature of urban leftover spaces, and what makes them formed??

**Method:** Case study research method.

Materials	Techniques	Sources
Satellite and Google earth images	Demarcating the case study area and layout on the maps	- Internet - GII - Researcher
Observation	Detail observation on the selected sites will be carried-out Field noted, recordings, and photographs	- Researcher
One to one interview	Scheduled and structured open-ended questions with city officials about the nature of ULOS	-Land management office -A.A Plan commission - Researcher
Focused group	A scheduled and structured open-ended questions with all representative bodies of the city administration related to the land/6-10 persons/	-Land management office - AA Plan commission - Researcher
Questionnaires	Open-ended questions focused on the formations of ULOS Which are in-depth to understand their nature	- Professionals -Land management office - A.A Plan commission - Community - Academicians
Secondary data	Reviewing the literature, documents, maps, and images, laws, rules, and regulations	-Land management office - A.A Plan commission - Municipality office - Literatures

Table 1: Material and methods

## 3. Result and Discussions

As **Sharukh Marfani, Patel Smit, Rana Nirav, Patel Savan, 2019** stated, urban leftover spaces can be caused by Planning, Functional, and Geographical.

1. **Planning:** These are the voids created due to improper and insufficient planning processes, also created from planning in isolation without understanding the fabric or structure of the city. These are most visible in cities.

2. **Functional:** The dead vacant spaces in cities are called functional voids. The spaces become defunct or inactive when spaces are not used like they were designed and occupy precious land in cities and make the environment unpleasant.

3. **Geographical:** These voids are the existing geographical features or structures in cities. Voids are created around these makes the space unusable like rives etc.

Contextual causes of urban leftover spaces in Addis Ababa case, MCC

Even if there are a lot of other contextual causes which are the reasons for the formations of urban leftover spaces in the city, first, let's look over the causes based on the above three which are affirmed and mentioned as causes for the formations of urban leftover spaces because they can also work for

Ethiopian cities mainly for the city like Addis Ababa, at the main city center, passed through so many urban planning processes. Because they are all there in the city at the case study area, it is crucial to look over them through the eye in which is where? All the selected spots in the action area can be categorized under planning, functional, and geographical causes as follows.

Functional	Geographical	Planning
Space in the municipality compound	Space in-between the two Arada blocks	The corner space to Mercato
Island space at Immigration	Tewodros square bottom left	Edge spaces at Tewodros square
Side Space at Ethio-Cuba park & Ethio-tell	Space in Fil-wuha compound	Street-side to black lion school
Street-side space at Ethiopia hotel		Edge space around AA stadium
Space under LRT bridge line		Biherawi edge spaces
Space around La Gare(Moha-Anbesa)		Street-side space at AIB

Table 2: Causes of leftover spaces in the action area

### Reasons for formations of urban leftover spaces

Formations of urban leftover space are related to the understanding of the root causes by questioning what, where, when, which, why, and how these spaces are made of. The following table is to shows the answers to the reasons for formations given by different professionals during the focus group discussions and interviews.

Causes for the formations uls	Reasons of formations
<b>Planning</b>	<ul style="list-style-type: none"> <li>: The understanding we have about planning</li> <li>: Gabs created in between the existing morphology and the new development.</li> <li>: Individual, single building thoughts rather than a harmonized city.</li> <li>: Parcel standard, minimum size requirement for development</li> <li>: Informal expansions towards public spaces</li> <li>: Gaps in between the data collected and the actual one</li> <li>: Mismatch of demand between the society and authorities</li> <li>: Design errors, which are caused when the data collected is different from the actual one</li> </ul>
<b>Functional</b>	<ul style="list-style-type: none"> <li>: Coloring green as a planning way-out, without intended purpose.</li> <li>: Lack of target, vision, and ownerships</li> <li>: Change in function, misused spaces</li> <li>: Function inappropriateness, spaces at different places without following land-use</li> <li>: Public space design implementations and follow-up problems</li> <li>: During land preparation and regularization</li> <li>: Open and vacant spaces lacking programs attached to them</li> <li>: To undermine leftover spaces, as they are not even capitals</li> </ul>
<b>Geographical</b>	<ul style="list-style-type: none"> <li>: Underuse of wetlands spaces, for parking, grazing, and informal playing fields</li> <li>: Space left for visual connections are still vacant without intended purposes</li> <li>: By action and inaction of the authorities in the city</li> <li>: Leftover spaces created due to infrastructure are still vacant, not treated well accordingly</li> </ul>

Table 3: Responses during the focus group discussion and interviews

**Planning:** This is the gap created due to the lack of understanding of the what: Planning is: The nature of the city: The what, where, when, which, why, and how of the functions to be allocated in the space provided for them.

**Functional:** it is the cause for the formation of urban leftover spaces due to the gap in losing target, mission, vision, and the overall use of land related to the social benefits.

**Geographical:** Become a cause for the formations of urban leftover spaces when they are used below their ordinary capacity than to provide because they are hilly, valley, and wetlands.

### 3.1. Planning as a cause of formation

The causes for the formations of urban leftover spaces in the Addis Ababa city case especially at the main city center

which are in the action area is primarily due to planning at its large scale because planning need to consist of a lot of responsible stakeholders in it, to state some, the capacity of professionals, the gabs in the administration wing, the academic unit, finance, technology, location, weather condition and the like.

It is very difficult to say our planning system is planning because planning is now functioning not at its full potential in the city. After all, it is not only about parceling and setbacks and building height, function, and, maybe at large about density. Planning is much farther from what is now practiced in the city, planning is all about organizing the lifestyle of people living in that city, by bringing happiness, and making them determine their future.

The main cause for the creation of urban leftover spaces in our city especially in the action area is the way we understand city development because what we understand is only as a collection of buildings, or infrastructure, or parks but that is not the case, city development is not only about piecemeal approach, an individual building, or street or park development it is the collaboration and harmonized link and the understanding that one is created for the other. Cars which are here in the city are for the people, not the people for the cars but when we look at how our city is functioning its all the reverse our streets are all planned, designed, and constructed excluding pedestrian walkways, all our streets are for cars that are a big gap we made on our city. All the buildings we construct are not respecting the ones who are walking under the building and also the plantations we have used for ecological benefits are not planted to shade for those who are walking and using streets in their day-to-day activities. This is one of the indicators that show the chaos we formulate, and the insensibility we have to the space in the city that is finally responsible for the creation of the unnoticed spaces which are called leftover spaces in the city.

The nature of Churchill Avenue road vs the nature of the adjacent organic city development because when the road was first designed planned and constructed, it was not following the existing organic city planning. It is straight down from the municipality up to La Gare so at that time it demolish some existing buildings which creates same true now in the new development when it is tried to widen the road and give the grace that Churchill avenue deserves it touches neighboring plots which are irregular in shape, so some which are not needed for the development creates the gap between the road and the development adjacent to the avenue which we can simply call them leftover spaces.

The gap between the existing morphology of the city and the new development plan, there are pieces of land created in between roads and boundaries which do not have owners are also leftover spaces.

Around demolished areas and those with new proposed roads have a lot of leftover spaces but areas like around Biherawi do not have much-lost space because planning at the area was properly managed means the road, pedestrians, and the building sequence can be even said the best exemplary practice of urban design in the city.

There are a lot of leftover spaces, especially around areas that are created due to demolishing of roads for expansion.

#### **Planning on an irregularly shaped city:**

the very nature of Addis Ababa is irregular in shape and following that every planning and urban design that the city had been through did not respect or come up with the understanding of this nature of the city, at the end every plot will have leftover space in it, which is created by the intension tried to build regular buildings and infrastructure on irregularly shaped plots.

By this time the difference will create negative spaces which can not be proposed for any other function and leave them vacant. To mention some as a reasons Irregular nature of A.A



Figure 1: Google earth image of Addis Ababa city

#### **Action/inaction phenomena:**

**Action:** Purposely through the lack of appropriating spaces for proper function in the design process without understanding the existing context. It is the tenth master plan that is now on implementing process, so it can be said it is too young but still wants to have a proper plan, which can formally serve the inhabitants but they are all failed because the city is bigger than the planner's intention and more dynamic than ever imagined, that shortly can be said the beauty of the city. And the city is charged with a lot of problems that her planners could not foresee.

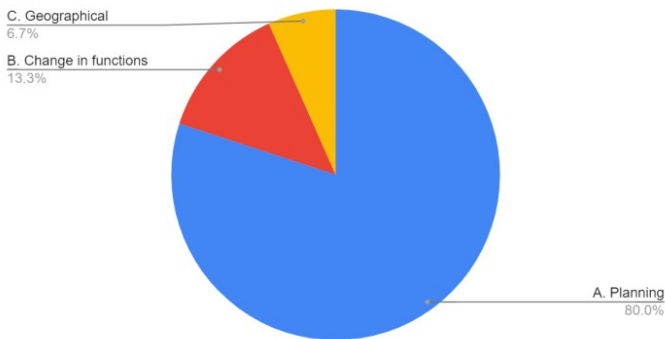
**Inaction:** Insensitivity, and when our intention was not there actually, leaving it without intention. In most cases it is our planning system which is only focused on the land use only with the structural plan, master plan restricted narrowly the way we manage our land but local development plans/LDP/ has a powerful tool to address and manage every piece of land in the city so, urban design will be the way-out and a system to know every detail about the pockets. The more challenged with land, the more we go to urban design details.



Figure 2: Picture showing the slope of A.A

As you can see from the chart, the cause for the formations of urban leftovers in the city that is given as an answer by the respondents is mostly by planning; this shows how much planning plays a big role in the formation of urban leftover spaces in the city.

### 1. What are the causes for the formation of urban leftover spaces in Addis Ababa?

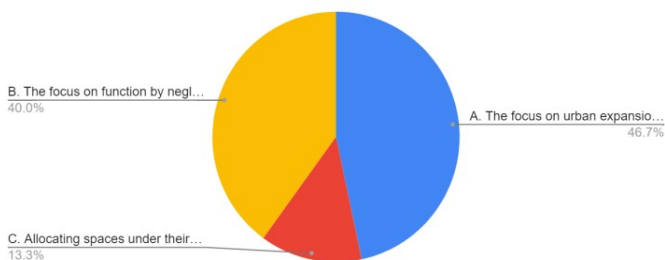


That is generated from the lack of proper planning and design practices, Urban governance, and land management, the insensitivity we have about our natural resources especially about to land, Inability to collect precise information about the land, Lack of capacity in detail planning, Low level of urban tradition that is: the way we think, rule, and manage the city is dominated by rural consciousness

As the city is getting denser and denser it is important to notice first to look over and evaluate how much of the space is used properly in the inner city rather than jumping to the periphery and thinking to expand. We do not have a plan which is holistically planned, designed, and constructed; this case will open a chance for expansion.

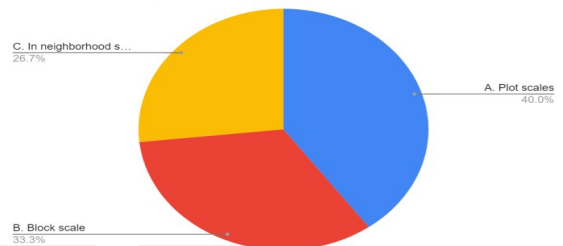
Most professionals are answered that planning which focuses on urban expansion is the reason for the space left in the inner city without giving due attention to how the spaces can properly be managed and arranged for those who are living in the area. the reason for this is, this happened because when we are following the top-down approach in planning without the participation of the society which is followed by their interest, economic base, and societal arrangement the result will become lack of proper use of a natural resource, which is especially land, and mainly the creation of unused spaces the city. It is known that spaces that are planned and designed have

### 2. How do you think planning acts on the formation of leftover spaces in Addis Ababa?



fewer leftover spaces than spaces not planned and designed. In this regard, Addis Ababa was not planned at the beginning, so the transformation from this unplanned to planned development by itself has contributed a lot in creating leftover spaces in the city: one of the contributors is the parcel they have, in the new rule and regulation, In plot scale: the standard parcel area formation at the MCC is a minimum of 3,500m<sup>2</sup> for a single plot of land development. This means if it is below the standard, what is expected is to join with the neighboring plot if not it will stay void. The other reason is that when we do not have an intended purpose during design that lacks detailing that can address what space for what kind of function then we left them as they are and will become leftover spaces. So, that's why we find leftover spaces in a plot scale majorly, as we can see from the response given on the chart.

### 3. On which scale can urban leftover spaces be created?



Example: spaces/buildings/ with setbacks especially side, front and rear compared with those develop together with in the block develop together with in the block.



Individual voids (setbacks)

Common voids

### How does planning become a cause of formation?

By principle, in any given project, every square inch of land has to be planned, designed, and a program must be attached to it, even to the extent to allocate layers of flexible activities, day and night of different activities. If it is not designed in such a way, it is going to be the Architects' or planners' drawback. When we look at both infrastructural and edge urban leftover spaces, they are all created by the lack of thinking on the spaces left after our main program is planned and designed even constructed, it could be a road, walkway, or a building.

The following selected spots are voids caused by the lack of proper planning located in the action area, and how does planning become a cause for their formation? It is by both

### Infrastructural and Edge space design.

**Infrastructural urban leftover spaces:** Are spaces created due to the constructions of roads and walkways, spaces that are left from what has been used: that is when some are used for the construction and a portion of land may be left aside the road or walkway that is not planned together with the whole body of development.



1. The corner space to Mercato
2. Streetside to black lion school
3. Street-side space at AIB

1. The corner space to Mercato



Figure 3: Google earth image: Corner space to Mercato



Figure 6: Picture: Street side



Figure 4: Picture: Corner space to Mercato

3. Street-side space at AIB



Figure 7: Picture: Street side uls

2. Streetside to black lion school



Figure 5: Google earth image: street side

Edge space design: These are also other planning failures that contribute to the formations of leftover spaces in the city, are mainly seen in the urban design scale of organizing cities. Happened when spaces are left at the edge of a plot mostly with an acute geometry and difficult to put regular building typologies they will be exposed to un-internalized programs such as public spaces and green areas.

4. Biherawi edge spaces

5. Edge spaces at Tewodros square

6. Edge space around AA stadium.

In a plot as well as in block plan preparation when a planner faces edge and corner spaces as a trend they all are programmed and allocated for public spaces and colored with green. They become a primary factor for the creation of urban leftover spaces in the city because green areas are spaces that must be programmed and designed with their function, size, vision, and aim by targeting the end-users, not simply because the planner left with an edge space and provided them for green, they all need to pass through detail understanding, calculations and types of the green to be provided in relation with the considerations of the users.



### What type of green is it?

Is it green with park or without? Is it green for children's activity? Is it green for elderly people with seating and benches? Is it green for the students' waiting area? Is it green preserved for ecological purposes?

#### 4. Biherawi edge spaces



Figure 8: Google earth image: Biherawi edges uls



Figure 9: Picture: Biherawi edge uls

#### 5. Edge spaces at Tewodros square



Figure 10: Google earth image: edge uls



Figure 11: Picture: square edge uls

#### 6. Edge space around AA stadium



Figure 12: Google earth image: corner uls

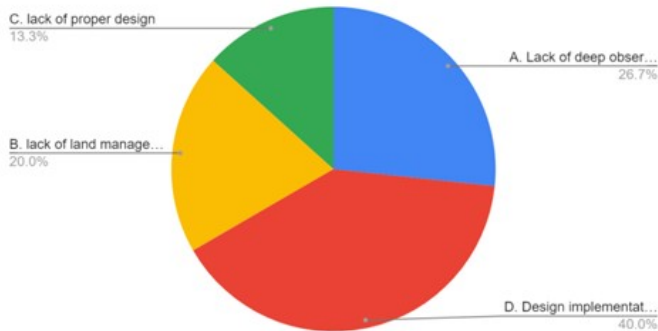


Figure 13: Picture: Corner uls

### 3.2. Function as a cause of formation

Generally speaking, they are formed by the difference that happened between what has been designed for the place and what is now the space is functioning, that is seen when these spaces are defunct and yet stay vacant, unprotected, and undeveloped. They were designed maybe for green areas, playing areas, public spaces such as a plaza, and historical places.

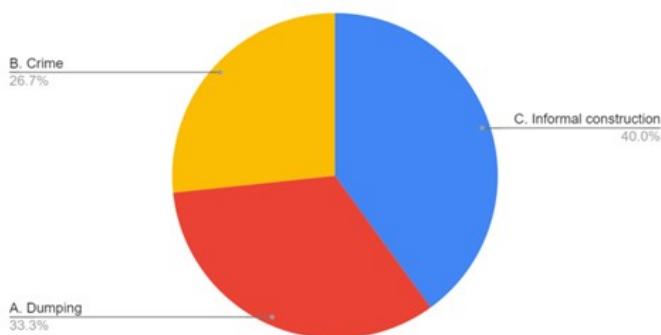
4. In your opinion and experience, what common possible reasons have motivated the city to keep urban leftover space...



The problem is not they are out of their desired function it is the thought that keeps them still unfunctional, so the question here is what the intention behind, what are driving motivations to keep them as they are now? Most of the respondents articulate that gaps in design implementation are the reasons. These indicate that the priority in the city development focuses on other issues neglecting history, public spaces, and green areas on its small scale.

The reason why we have to keep the urban environment specifically the urban space safe, protected and developed is not only they are becoming wastage, but also because they will become sources of crime, dumping, and they will also initiate informal constructions when these spaces are vacant or empty without any function, they are forced to think of the space for other function that is different from what is recorded on the plan, by this regard, it is important to think all the consequences coming together when making spaces vacant and leftover without any further effort regarding the implementations what is exactly their on the plan.

5. For what kind of problems can urban leftover spaces be exposed?



As you can see from the respondent answer for the consequence of urban leftover spaces it is clearly shown that they

are more exposed to informal constructions in the city best trend in the city is the informal expansion of plots by the public office like Ethio-telecom, which also contributes to the formations of leftover spaces they tried to fence the public space, and not develop it for so many years and keeps it vacant. but if they were developed according to where planned, be its public space, a plaza, green area, or urban parks there is o way that interest will come out on them.

Space created duo to change in design also create leftover spaces, especially at individual plot level.

Urban transformations mainly infrastructural specifically the LRT line contributes by creating oddly shaped spaces, it took some spaces in as part of the development and the rest portion land becomes out of function which is leftover.

Ownership is also one of the basic aspects that should be asked for every plot designed, specifically for those spaces colored with green without function?

- ✓ Who owns it?
- ✓ Who is going to follow up on the space?
- ✓ For what kind of function is it allocated?
- ✓ For how many persons is it going to be used?

Inaccessibility can even create leftover spaces after being designed and constructed with the program on paper but if the space lack users and people to access, and then it will become leftover space.

#### Others

- ✓ The strategical ideologies where the city is running in, because, in a different time, different ideologies may run in the society by authorities so, spaces are used as a tool to reflect their ideas in the city. Including the change in function into a vacant space.
- ✓ The capacity of the authority to make space functional based on what is planned will also make spaces to be leftover.
- ✓ Design errors.
- ✓ The mismatch between the interest of the society and the authority.
- ✓ Underutilization of spaces can create also leftover spaces.
- ✓ The context, size, and imagination used to work on the structural plan are different from the urban design scale. In this case, the difference will create these unwanted spaces usually leftover spaces.
- ✓ Interest and dynamic nature of the society.
- ✓ The gap between the planner's idea and the community can also create leftover spaces. Especially when new ideas are introduced to society.
- ✓ Urban leftover space may not be created purposely if there is a space created that can be easily called the mad practice of planners.
- ✓ When urban spaces are created without formal discussions and negotiation with inhabitants for their appropriate activities.
- ✓ Spaces created intentionally but not appropriated accordingly.
- ✓ When spaces become deteriorated and obsolete.
- ✓ Deliberate activity in the public spaces



The spots included under functional causes in the action area are

1. Space around La Gare (Moha-Anbessa)
2. Space inside municipality compound
3. Island space at Immigration
4. Side Space at Ethio-Cuba Park & Ethio-tell Street-side
5. Space at Ethiopia hotel
6. Space under LRT bridge line

### 1. Space around La Gare (Moha-Anbessa)



Figure 14: Google earth image: island uls



Figure 15: Picture: Island uls: Source Biniyam G/M



Figure 16: Google earth Image: Municipal compound uls

### 2. Space inside municipality compound



Figure 17: Picture: Municipal compound uls

### 3. Island space at Immigration



Figure 18: Google earth image: Immigration Island uls



Figure 19: Cad drawing: Immigration Island uls



Figure 23: Picture: Side space to Ethiopian Hotel uls

#### 4. Side Space at Ethio-Cuba park & Ethio-tell Street-side



Figure 20: Google earth image: Street side uls

#### 6. Space under LRT bridge line



Figure 24: Google earth image: Under-bridge uls



Figure 21: Picture: Street side uls



Figure 25: Picture: Under bridge uls

#### 5. Space at Ethiopia hotel



Figure 22: Google earth image: Street side uls

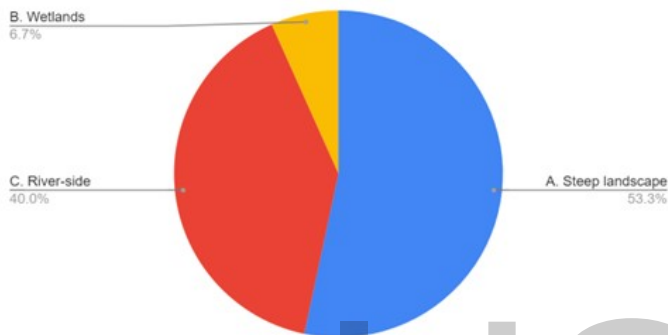
### 3.3. Geography as a cause of formation

Leftover spaces that are created in terms of geography (topography, wetland, and riverside) in Addis Ababa city case, is after the spaces are open for tender they may not get an owner who can develop the site, due to the difficulty in



topography or the water level they are found in. as the chart also indicates the cause for the formation of urban leftover spaces discussing geographical as a reason, what comes first is topography, when the slope becomes steep is it assumed that it is difficult to build other than respecting it and working on using adapted design approaches it will be neglected, in this, the space become undeveloped and vacant for a long period and finally end up as dept in which you can not pay it back. Assume their centeredness, the development that surrounds them, and every infrastructure cost for that area to make it functional and give services. As long as the spaces stay vacant the cost that incurs the city will increase at the same time.

6. What geographical reasons can be mentioned that contribute to the formation of urban leftover spaces in Addis Ababa?



This is not only caused by the irregular and hilly nature of Addis Ababa but also by the gap in the planning approach followed to organize the city, which does not consider and respect the irregular shape of the city which helps to easily create leftover space at different locations of the city.

The reason which makes it difficult during the implementation in creating these urban leftover spaces is the lack of concrete rules and regulations about these spaces, the value we have for land because it is assumed that the land is government's property so individuals are not much serious on it. Awareness in the society, as well as the government in the land value, knowledge, and capacity of institutions, is directly responsible for the land, land-management system in the city.

#### Other causes

- ✓ Unwritten city authority derives rules are also causes for the formation of spaces which are leftover due to security, and some other reasons.
- ✓ Other than design, soft aspects can also create leftover spaces in terms of perceiving any open space as a leftover space.
- ✓ Lack of Understanding Example: the wetland at fill wuha area was left to recharge the aquifer, other than allocating better function, now the area is under construction of buildings, parking area, football playing field, and grazing spaces.
- ✓ The capacity of manpower and integration of institutions are also important factors for the lack of plan and implementation of design in geographically chal-

lenging areas.

- ✓ Flood is one of the main causes for the formation of the space because the area is much flooded, it was difficult to construct and settle inhabitants there, so this becomes the reason for the space to be idle for a long period without any human activity.

The spots related to geographical causes in the case study area are

1. Space in-between the two Arada blocks
2. Tewodros square bottom left
3. Space in Fil-wuha compound

#### 1. Space in-between the two Arada blocks



Figure 26: Google earth image: In-between uls



Figure 27: Picture: In-between uls

The space in between the two Arada buildings is misused spaces because even if it was functioning as a café back in the days, the place is previously left for purposely of the view from municipality down through Churchill Avenue up to La Gare train station. But it was not planned, designed, and constructed accordingly, it lost its initial function plus even if it is serving as a café with a lot of problems in one way it is func-



tional, in another way not, totally not as its potential which can give, and also the place is not secured, almost the space was for street dwellers, with a lot of street dogs, street open-air toilets, not safe even difficult to pass along that road.

## 2. Tewodros square bottom left



Figure 28: Google earth image: Gorge uls



Figure 29: Picture: Gorge uls

This space is found at the main city center as is indicated in the location of the case study area, In a plot scale, that is plot leftover space formed by the cause of geographical reason which is topography.

Looking at the experiences and trend in developing urban design and local development plans there are spaces created

intentionally without being conscious about the consequence of that space in time, most of the time whenever we get a corner, triangular, or an edge space in the form of the design, the trend to treat that space is simply by coloring green and attaching it with a public space program, but here what makes it different from other neglected spaces is not like because it is a corner or edge space, this full plot scale land with a hilly topographical nature, as a result, becomes difficult for the city to treat it according to the nature it has with a convenient plan and design solutions and finally make this huge vacant space functional. what is good is maybe to relate them with the neighborhood land-use and give them sufficient activity without wasting this precious urban resource.

## 3. Space in Fil-wuha compound



Figure 30: Google earth image: Wetland uls



Figure 31: Picture: Wet-land uls

Map analysis and historical narrations can be used for understanding what makes spaces formed, but some scholars like Dandena Tufa, 2008, mention in the article that the space was initially for treating skin diseases, people come there and construct tents for a few days and washout their bodies with the hot spring water and become free. And then the focus of the emperor TayItu Butul become on the space because of the cold weather of Entoto's hilly residence, and the new grand palace with tapped hot groundwater was constructed near fill-Wuha. The boreholes found inside the field are also the other reasons to protect the area from any construction. The proximity it has to the palace is also the other reason not to be developed, for the sake of security and safety of the administrators.

#### 4. Discussion

In discussing the nature of urban leftover spaces, essence, or by its definition the substantial nature, could be explained by different means but the study tried to look through their cause of formation because, for anything that appears physically like the one we are discussing, it has its cause for its formation before it goes to its other form. Discussing their nature cause are the basic means to answer their existence. As it is well explained in the result that there are a lot of causes for the formation of leftover spaces that are mentioned by different scholars in their articles and books starting from Roger Trancik, 1986, "finding lost space" where the idea of lost space is started to be an issue up to Sharukh M. 2019, "causes for the formation of urban leftover spaces" including Dendena Tufa, 2008, "Historical development of Addis Ababa". The study used the knowledge developed by Sharukh, because the causes explained are inclusive and cover all the causes explained by other studies as well as the ideas indicated as a cause during the focus group discussion, interviews, and questionnaires with Professional Architects and Planners, Geographers, Academicians, and Practitioners. The causes mentioned are planning, functional, and geographical. Here every one of the causes become also the cause for Addis Ababa not only that even for all the spots selected as a case in the action area. From this, it is clear to understand that leftover spaces have vast and complex causes that it is difficult to see and conclude their formation with one reason unless we study and found the exact cause.

Regardless of the study made specifically on leftover space, it was difficult to find written documents as much the study needs, one reason is the issue is very recent even globally it only counts not more than three decades. In discussing leftover space causes it is not necessary to classify them as planning, functional, and geographical because when we look at them all, they are all the gabs of planning. When we say it is functional, as a cause it is to mean that the spaces are designed, constructed, and are giving services but become defunct or inactive. This indicates that the spaces did not pass through all the necessary steps and feasibility study within the considerations of what consciousness they will face in the future. This directly means the spaces did not have all the steps of planning because when we think of planning, the scope is not limited to the present generation only it is providing services for the present generation within the past trend in considerations of the coming one. When spaces are having ideas only for the fulfillment of the present, they will become inactive or leftover at the end. The same is true for geographical causes that they are the result of planning because when we think of planning again, it is not only for spaces with flat topography, and it is for all types of nature be it hilly, waterbody, flat, or gorge but the study observed that spaces that are assumed to be challenging in their nature gorge or water areas are neglected and thrown away not become part of the city development, that is the failure of planning because if planning had done for this spaces too, there was nothing to discuss today as they are leftover spaces in the city. So, because plan-

ning means everything for a city "it is what we shape, that shapes us" as a result whatever, it is functioning or geographically void, they all can be managed under concisely and intentionally developed ideas of a city which is planning.

Planning was taken as a cause for the formation of urban leftover spaces but not in a detailed way that has functional, geographical elements. The study finds out that spaces that are inactive and defunct are considered as leftover spaces unless they are protected and assigned by planning as no man's land for ecological purposes in the city. So, the study is more expanded the hypothesis which was only limited to vacant spaces. In dealing with nature, especially through causes of formation, there are a lot of elements to mention because the purpose of the study is to find out the root causes for the formation of these spaces and generate knowledge that can be used by academicians, practitioners, and professionals at the end as an insight, because they are all, took a part in the formation of the spaces too by allocating acute spaces for a green area which is not, not passing spaces through all the necessary steps to be followed during planning, and unnecessary planning approaches by neglecting hilly, gorge and water areas without due considerations. Because the concept of leftover space is vast this study only covered spaces that are public but neglected for different reasons. And the study believes that there are leftover spaces like spaces at the roof-top, private spaces, spaces related to the height of a building, vacant spaces found in a neighborhood, condominiums, real-estate, governmental compounds, universities, schools, and different institutions are potential areas for future studies.

#### 5. Conclusion

As it is indicated in the discussion, it is important to understand leftover spaces through the eye looking for the causes, to understand their nature primarily by identifying the forces which created them like what makes them formed and their initial root causes. Then it is easy to fix the problem because they are either of the three 1. During planning 2. Change in function 3. Geographical reasons, once we get the root. It would be even helpful to go far up to the revision of the planning policy then this will allow us to establish new coordinates and methods to appropriate them for particular use which is demanded by either nature or society, in terms of incorporating leftover spaces as one of the urban elements in the urban space and to be conscious while designing neighborhood design, urban design, and any of designs related to the formation urban leftover spaces, so it gives us a clue to what extent that we have to use our natural resources to create a better environment.

Generally, the overall purpose of dealing with the urban leftover spaces at the end is to achieve efficiency of the land, found in and around urban areas, so if we can focus and think out loud on the causes and solve them by making them part and parts of the planning policy, principles, theories, rule, and regulations then it would be easy to minimize the number of leftover spaces in the city.

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