

CHAPTER 1: INTRODUCTION

1.1 Background of the study

Dobbins (2009) expresses commerce and the exchange of goods and information through barter, money or social interaction as one of the most enduring activities that people have undertaken essential to their existence. From the earliest settlements, places have developed to accommodate this fundamental function. Areas where the products for trade are produced along with topography, climate, orientation, water, landscape, location of settlements, the best travel locations and infrastructure that connects them together to form settlements. The market in any kind of form is the defining image of the city. The Agora, the Forum, the Plaza, Mall and Wal-Mart have been places that define elements for the city and serve the diversified local society as a ground of interactions.

Marketplaces are not just centers to exchange goods only but also spaces for the interaction of people, idea and culture. Traditionally, the function of retail markets is not limited to economic activity (Bohannon & Dalton, 1962). Their functions and the multiple activities are common for all markets. Market places have been serving as areas of commerce mainly but also as areas of social activities, where people and friends meet to discuss issues, children play, and political activities take place like demonstrations or public discussions.

Societies, throughout time, have constantly tried to locate and create places that are suitable for the fullest range of the market activity. For urban designers, involvement in the creation of these civic places and institutions is of a primary importance, almost definitional. (Dobbins 2009)

The multiple activities that take place in the market bring a huge interest to this space. Like any other public spaces, the type of markets and the activities that take place have evolved through time from open markets to contemporary malls and hyper markets, too.

Such evolution is also seen in Addis Ababa. The evolving market culture of the city has left the conditions of open markets unchanged and undeveloped. Though open markets are important features of the urban realm they have not been designed in such a way to address the issues that should be considered in the urban design discipline. Through design, the physical, social and economic conditions of markets should be improved in such a way that it can be able to improve the living and economic condition of the traders, simultaneously.

Most of the urban poor who are involved in this activity, have been seen to depend on open markets so as to get daily income. In Addis Ababa, Agoza Gebeya, 76% of the traders are found to have an income of less than 200 birr per week and less than 10% of them with an income of more than 600 birr per week (K.K.K. MSEs, 2012). With this income, 77% of the traders manage their families with a household size of 3-5 people and 23% of them with a household size of 1-2 people. (K.K.K MSEs, 2012). From these statistics it is evident that a large number of the household earn their daily income by depending on the Agoza market even though, the income they earn is hardly sufficient for survival. In order to improve this, the entire condition of the market needs an urban design intervention.

Urban areas are spaces where people can find better employment opportunities. Creating better job opportunities should be considered as an aspect in order to guide the design process. Street traders who are involved in an open market trading and their target groups called customers are the urban poor. Markets are also spaces where people coming from different cultures, religion, ethnicity and various backgrounds are able to interact daily. Open markets have big potential in terms of creating employment for a large number of the urban poor and create places having a high level of social interaction.

The Addis Ababa Master Plan identifies the main market areas in its structural plan. It illustrates the primary and, secondary markets together with their proposed primary and secondary markets and the center.

Addis Ababa has been structured into 10 sub cities and 116 administrative Kebeles, where all municipal services are put out to grass root level, being decentralized in all regards. (MWUD, 2006). Therefore, local open markets are identified and administered by their respective sub city.

A study done by the Urban Planning Institute of Addis Ababa has shown that the city government has been putting a great deal of effort to prevent the very aged socio economic problems in urban centers like unemployment. In this aspect, various efforts were done towards creating thousands of job opportunities in MSE development program. This has been done through providing and facilitating multi facet supports, such as creating access to credit, continuous technical assistance, allowing market access, exempting taxes, providing working areas and the likes. (MWUD, 2006) In terms of the developments of MSEs, the emphasis has been given on economic growth and the role that improved competitiveness plays on insuring sustainable growth (MWUD, 2006). Though

the scale varies, open markets are also considered as part of the MSEs' development program. Those markets which are not still included are also given attention by the government program.

Source: Urban plan preparation and inspection department, 2005

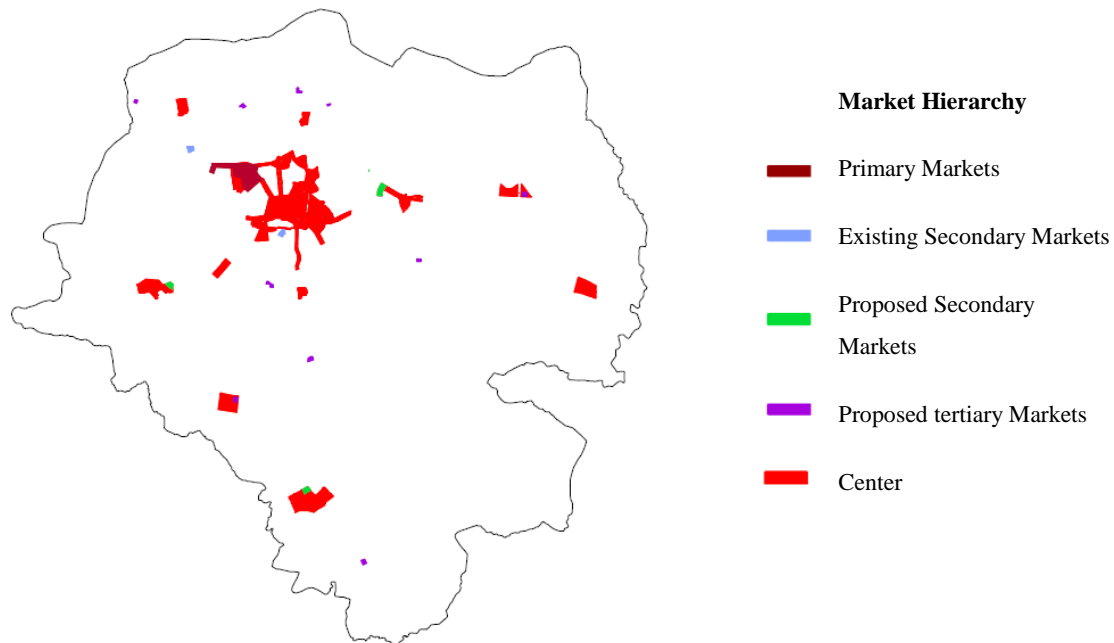


Figure 1.1 Market Hierarchy

The study identified some reasons as to why these open markets, which are included as part of the MSEs programs are not functioning to the fullest potential or plan intended. Some of the issues that are identified by the study include:

- Unbalanced market distribution and hierarchy,
- Inadequate and low quality customer service,
- Ever increasing informal trade,
- Dilapidated market infrastructure and shops.

Those that have been included in the MSE development are not inspired to stay as part of the market they rather prefer to work informally. Some of the identified reasons and challenges include:

- Ease of access of such a market helps them to sell their products quickly,
- Avoiding the shortage of capital and unable to stay in the market

- The barrier to benefit each other,
- Maintaining proximity between the market and producers,
- Lack of capital,
- Shortage of skill,
- Low quality products,
- Weak organizational structure,

Some of the constraints of MSEs in Ethiopia include:

- The legal and regulatory systems;
- Difficulty of access to markets;
- Lack of finance and business information;
- Difficulty of access to business premises at an affordable rental price;
- Lack of the acquisition of skills and managerial expertise;
- Difficulty of access to appropriate technology;
- Difficulty of access to quality business and infrastructure;

The last problem associated with MSE development is that they are posing a massive planning defect up on the city. In many cases, their spatial orientation and plot size standard are not harmonized with the entire structural plan of their existing settlement. (MWUD, 2006). The structural plan should provide and develop urban spaces for informal trade and production within some active areas of the city so as to create income generating spaces for the urban poor.

1.2 Statement of the problem

Open markets have existed since the establishment Addis Ababa's. There is a high level of urbanization and development in the city. With this, there has also been a cultural change in the markets. However, the cultural change of such a market has not been able to improve the conditions of open markets, leaving them undeveloped. The change is mainly characterized by a drastic change that facilitated the loss of their unique characters. Nowadays, the way open markets are tended, is similar to how it had been during the establishment of the first markets.

Open markets, being part of the urban realm need proper design. The current open markets need urban design that is accompanied with guidelines and standards. Comfort and accessibility for the

consumers, and the service and suppliers need to be reconsidered in the design. The attempts that are being made towards improving this traditional markets are creating a different market culture but they are mostly built to be more expensive for both the consumers and the traders. Much of the traders who are in the business involved are the urban poor who are living with a very poor economic conditions since they earn their daily income by relying on these markets. The betterment of these markets can enhance the economic and social conditions of its beneficiaries in an integrated way that stitches, both, physical and socio economic developments together.

While trying to improve the current condition of these markets, the market trend in the city has been seen to transform into a culture of contemporary mall like markets. Do the contemporary markets have the same economic and social qualities as that of the open markets? These contemporary markets which are found in the populated city of Addis Ababa are too expensive for the urban poor to work in and buy from. How can it be possible to open markets; as part of the public realm; with the same part of the community buying and selling; having its social and spatial qualities having an improved quality and design; and appealing and being comfortable for people to use? The unique character of the existing market culture and its dynamicity should be considered in the development plans but the issue in focus is usually seen neglected in practice.

The open markets in the city can be seen to inherit poorly organized conditions. Issues of infrastructure and services, sanitation, lack of proper and formal locations, poor maintenance, congestion, unfavorable living and working conditions, pollution, poverty and, lack of security are few of the issues that need to be addressed while considering open markets.

In urban areas where there is a need for employment opportunities, these markets create job opportunities for entrepreneurs with limited investment. In Addis Ababa, these markets are seen with a different scale but all have the opportunity to improve the living conditions of the urban poor.

This project can serve as a direction or a new dimension in which these markets can be developed without having to resort necessarily to the contemporary market culture. It can also be considered an experiment that can be used to improve the different features of traditional markets, maintaining these qualities and at the same time addressing its various flaws.

1.3 Key words

Markets, Open markets, Market Qualities and Open Market Design, Traditional Markets.

1.4 Objective of the research

The main objective of the research is to explore methods which can improve the quality of open markets through design and investigate ways through which these markets can be part of the formal economic sector. Hence the specific objectives are to:

- Identify the social and economic situation, as well as the spatial qualities of open markets and improve them by urban design intervention without losing their qualities in the traditional setting,
- Investigate ways in which more job opportunity can be created through spatial design,
- Develop urban design guidelines for open markets which can easily be adopted by the various markets around the city in specific and the country, in general.
- Making an experiment on the use of simple construction materials and waste management techniques.

1.5 Research questions

The research will address the following questions as part of the theoretical research and the empirical study.

1. What are the most important social, economic and spatial qualities of local open markets?
2. What kind of urban design measures and appropriate building technology need to be taken and used to make open markets feasible and sustainable without losing its traditional qualities?
3. What kind of creative solution can be scaled up to other parts of the city with similar spatial situation and create job opportunities?
4. What external factors have inhibited the formalized development of these markets?

1.6 Scope and limitation

The issue of an open market development involves various subject matters which include spatial, economic, and social issues. These issues have been widely analyzed and given a suitable solution in the case area. The various aspects that are discussed make these issues complex especially with the limitation of time, background materials and pieces of information on behalf of open markets and the case area, too.

While considering its scope, the project covers mainly the case study area, i.e. Agoza Gebeya, discussing with various issues in detail and gives a specific solution to each of the in detail. In addition to that, the study has tried its best to formulate a general urban design guideline that can easily be adopted by other open markets which are available in the city of Addis Ababa.

1.7 Research methods

The research explores the social, economic and spatial conditions of open markets and tries to give a design solution to each issue that is raised in the case study area together to formulating an urban design guideline. To achieve this, both primary and secondary data were collected and analyzed so as to propose a suitable design and forward some recommendations that are assumed to be able to improve the existing deteriorating and poor conditions of open markets.

1.7.1 Choice of method

This study aims to understand and explore new methods which can improve the quality of open markets through design by having clear understanding of the spatial, social and economic qualities of open markets. In order to accomplish the aims and develop an urban design guideline, which can easily be adopted by open markets around the city, an understanding of the existing conditions of the market in clear terms and the interest of the traders is required. A clear understanding of the situation and context will help into get to the root level of the problems and develop a design solution that can solve the current conditions that can easily be adopted. Therefore, making a case study is the most appropriate method.

The case study will be used to have a clear understanding of the situation together with having contextual understanding not only solve the design issues of the case study area, but also develop a design guideline proposal.

1.7.2 Selection of a case study area

Different open markets that are informally organized were considered as candidates for the case study. Out of all the various open markets (Gebeya) visited during the survey for the selection of the case study, the Agoza Gebeya was selected based on its scale, level of improvement, old age and last but not least its environmentally vulnerable location.

In order to make sure that the case study can actually be used to achieve the aims of the study, some criteria for selecting case study were identified:

- An open market that is informally organized,
- A market with a high potential for development,
- A deteriorated physical condition, spatial organization and economic conditions.
- An inner city open market that has a historical significance,

1.7.3 Sources of data

In broad category, the main sources of data are: government agencies; individual traders, customers, and individuals in the surrounding area; survey of the environment under study.

a. Government agencies

Government officials at the city, sub-city and local level were approached. At the city level, the Urban Planning Institute provided the master plan and the necessary information regarding the other government agencies to approach.

At the sub-city level, officials of the Micro and Small Scale Enterprise of Kirkos sub-city provided the necessary information on the organization of MSEs.

At the local level, Wereda 8 Micro and Small Scale Industries Office in which the Agoza Gebeya is included also provided secondary data. They provided current studies and development plans with some concerned parties along some related issued.

b. Community based organizations

The Agoza Gebeya traders committee is a self-initiated organization working with Wereda 8 micro and small scale industries office to create a better working condition in the market and work on solving the problems by working closely with the Wereda. The officials of the Agoza Gebeya traders committee made some interviews and also assisted with the interviews that were conducted with the traders.

c. Individual traders, customers and some people living around the surrounding area

Individual traders, customers and some people living around the surrounding area were also participated in the study at a different level. They took part in the survey of the questioners, assisted with the site survey and facilitated the interview that were made to proceed smoothly.

d. Survey of the environment

The visual survey that was made is found to be a huge source of data. The spatial character and current condition of the market is studied through this process. Spatial components, such as the physical condition of the shops, the various materials sold, the zonal distinctions, the infrastructure and service provision and the overall organization of the market require direct observation.

1.7.4 Data collection techniques

a. Interviews

Interviews conducted with officials and key informants in the market were found important in providing the necessary information. Discussions made between the traders and the officials of the committee were used to understand the main problems of the issue.

b. Questionnaire

Questionnaires were given to the traders and customers of the area too. The first part of the questionnaires are focused on the socio-economic conditions of the traders and the second part of it on the market conditions, including personal views and opinions of the traders.

c. Photographs

Photographs, taken by the researcher, were used to capture the current spatial conditions of the market. The photographs, combined with maps and written information are used to get a clear understanding of the market.

d. Mapping

Mapping was used to organize a detailed document about the morphological and functional layout so as to be able to make a detailed analysis about the specific site. It was also used to interpret and see the visually observed conditions graphically.

e. Documents

Secondary sources, such as reports, books, proposals, research papers, government policies and guidelines and maps, obtained from different government offices, and libraries were also used to analyze the basic issues under investigation.

1.7.5 Data analysis

The bulk data that were collected from field work are analyzed in such a way that they can be able to address the need of the research questions. The contextual study from the case study will be compared to the theory.

From the issues that were identified in the case study, some of them that can be grouped as a general issue are noted. The case study is viewed under three identified the key issues;

- The spatial and physical conditions of the market,
- The economic conditions of the market,
- The social activities that are accustomed to be practiced in the market.

The data collected from the field work of the case area is analyzed against the key issues that are mentioned above. From this comparison, and the detailed information that is obtained theoretically and practically, a general guideline is proposed.

The final stage of the research considers the above mentioned analyzed data of the case area that is made passing through a theoretical study, and in comparison to the key issues aroused basis to develop concept and some general rules that can be applied during the design process.

The issues that are identified during site analysis, are found to be the foundation for generating a concept together with its application at the site under study. From this, a detailed and applicable design solution that can address the aim of the research is given.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

This chapter covers the basic theories and research findings by referring different literatures that are related to open markets. In accordance to the aim of the research, this part will cover the theories, different perspectives and developmental approaches of open markets.

The first part covers the development of markets as part of the process of civilization in Ethiopia and the development of markets starting from the Pre-Axumite Ethiopian civilization to the present development that is observed in Addis Ababa. The second part deals with the character of markets as social, spatial and economic spaces identifying their quality and relating each of them to an urban design principle. The last part covers the policies and development approaches of open markets as part of an urban design process that can integrate them to the design of urban spaces.

2.2 Development of markets

According to Bahru (1998) in the process of civilization human beings started to lead a sedentary way of life from a nomadic way in which time they sustained their lives by hunting and gathering. This was caused by domestication of plants and animals giving rise to a new mode of life which was an agricultural and pastoral mode of life. Surplus production led to the need for better tools and utensils giving rise to division of labor. Some were involved in agriculture while others were craftsmen who produced tools and better utensils. Crafts men and farmers met at predetermined places in order to exchange their products. (Bahru 1998)

Through time products from the craftsmen and the farmers were taken by some and exchanged at these predetermined places. These predetermined places came to be known as markets with their respective heads or chiefs who were assigned to protect and collect payments.

Since the time of their development, markets have served various purposes. Bohannan and Dalton (1962) stated market places can be utilized for almost every conceivable purpose that requires a large number of people brought together in a controlled situation. The term market and market principle is the one that needs distinction. The market place is a specific site where a group of buyers and a group of sellers meet (Bohannan & Dalton, 1962). The market principle is the determination of prices by the forces of supply and demand, regardless of the site of transaction (Bohannan & Dalton, 1962). This research is concerned with markets that are characterized by the first definition that is given to markets.

2.3 Markets in Ethiopia

Bahru (1987) states that towns were essential features of the Ethiopian social and geographical landscape at different times. In the development of Ethiopian towns, three major institutions have been known to play a key role. Market being one of these institutions, churches and palaces, also play different parts in which the market structure plays the economic role.

Different towns are made with different specific reasons. Some were made for political reasons from which the towns are formed as military camps which led to the formation of the word *Katama* (Bahru, 1998). Though the reasons are said to be different, it can be said that all towns had flourishing markets.

Markets in Ethiopia have long existed since the time of the Axumite period. Trade was what led to the glorious days of Axum. Trade could be said to have been the life line of Axum. (Bahru 1998) The main reason for the development of markets in this era was the division of labor. These people were involved both in internal trade, import and export as well.

In the medieval period there was the revival of long distance trade (Tsfahun 1993). There were a number of merchants who were believed to live by trade though the lack of permanent settlement and permanent seat of power had its influences. The revival of trade contributed to the emergence of towns and market centers along the route of the central city.

In the 16th century internal trade have developed drastically, there were markets held every week where people exchanged their goods. Barter was their medium of exchange instead of money. (Tsfahun 1993)

The Gondarian period, on the contrary, created stable conditions. Gondar was the seat of imperial court starting 1630s. During the Gondarian period, commercial activity had significantly increased due to the emergence of Gonder as the permanent capital city of the Empire (Tsfahun 1993). Stability led to the development of Gonder as center for commerce. Although much of the market space was given to small scale, local and regional exchange, much of these towns played an important exchange role in the rural economy. Monday and Saturday were the two main market

days in Gondar (Tesfahun 1993). Bahru states that the existence of artisans, craft production and other specialties is another character found surrounding markets of that time. Much of these artisans were also peasants who took advantage of living near markets for selling their goods and access to rentable lands. Gondar is known to have the largest group of artisans. Surrounding these markets are *Tej bets* and *Tella bets* which characterize urban services. The Gondar market was a meeting point for people (Bahru 1998).

Around 1840s, there were three important trade centers namely Ankober, Angolala, and Aliu Amba which were the principal market town with Friday as the weekly market day and having merchants from various parts of the country. During the 20th century, trade moved southwards. Much of the reasons being political with the downfall of Gondar and political struggles of Shoa and Gojjam, stable trade and socio economic developments were difficult to achieve.

The coming of Menelik II to power and the victory of Adwa led to the consolidation of Addis Ababa as the capital. (Batistoni & Chiari 2004). Addis Ababa was founded in 1886 but served as a capital since 1892. It further developed and assured its commercial centrality since 1917.

2.4 Markets in Addis Ababa

In the early years of Addis Ababa, after being founded by Menelik II in 1886 E.C, there were a collection of *safars* which as translated by Bahru (Bahru, et al.1987) can be called camps. These camps were composed of the nobility and the palace servants. The city initially grew around two centers, the *Gebbi*, the imperial palace serving as the political center and the St. George church, the religious center. *Arada*, which was later developed as a market center also had cultural and commercial importance.

Characteristic of these *safars* included agglomeration of huts with thatched roofs and mud walls. Most roads were constructed to connect the *safars* to the *Gebbi*. The *safars* also consisted of a setting up of a neighborhood market (*Gulit*) which can still be found around the city today and local bars.

If the *Gebbi* and its satellite *safars* illustrated the political military origins of Addis Ababa, *Arada* reflected the commercial activity that is inherent to urban settlement. (Bahru, 1989). *Arada* eventually grew to be the urban soul for Addis Ababa.

Source: Old tracks of the New Flower, 2004

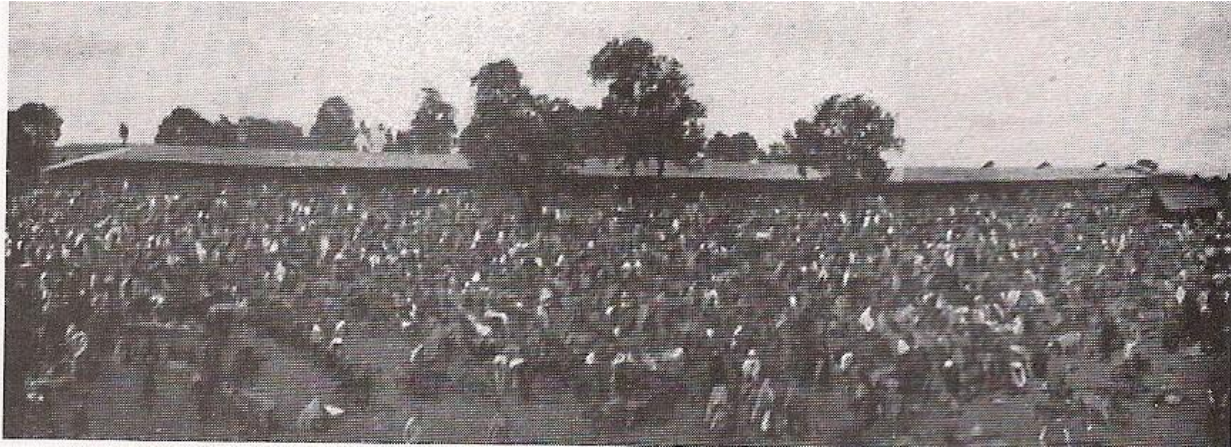


Figure 2.1 Arada market in the 1900s

From the city's old maps the close relationship that existed between the development of the market and the growth of the city emerges very clearly. (Batistoni & Chiari 2004) As written by Powel Cotton, cited from (Bahru, et al. 1987) "one might see more of the people and their ways of life in one morning than in a week's wandering about the capital".

Arada was occupied by businessmen, traders and craftsmen. This market was held in open air every day, except on Sundays and having a large number of people on Saturdays. Various commodities were sold and the market was divided into fifteen specialized areas. Other than Arada and the small local markets (*Gulits*) which sold foodstuffs, there were hardly any shops, except very few attended by foreigners such as Indians, Armenians and Greeks.

Large number of attendance at the market did not necessarily mean large volume of commercial activity. The huge crowd would be composed of people who come to talk, relax and exchange the news. (Bahru, et al. 1987) The market was also the place where the imperial proclamations were made public, which was usually on Saturdays.

This market also attracted a large foreign community. The once open stalls were replaced by shops by foreign traders, mostly who came from Armenia, Greece and India. This event is what led to

the development of a modern shopping facilities which has sustained Piazza and continued to be a modern urban center.

Source: Old tracks of the New Flower, 2004



Figure 2.2 Proclamation at the market in 1909

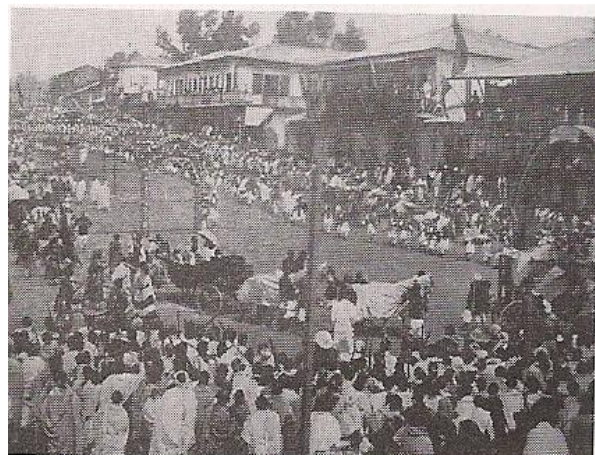


Figure 2.3 Arada in 1926- 1928

During the Italian occupation in 1936, and their policy of segregation, the open market that was once in Arada was later moved to Mercato, a market area created by the Italians and a surrounding Ethiopian settlement. Migrants attracted by the market and pushed by endemic wars in their region settled around Mercato which was later called Addis Katama.

The development of the Railway led to the development of another local market area called Cherqos, around 1917/18, as the source of food for railway workers.

Source: Old tracks of the New Flower, 2004

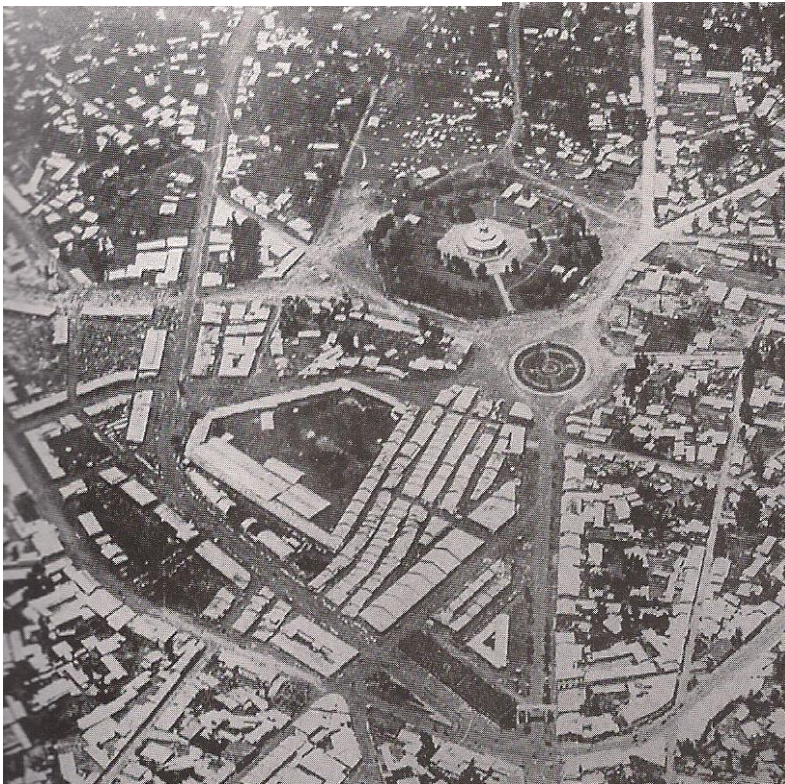


Figure 2.4 Aerial photo of Arada and Ghiorghis Church in 1936

2.5 Markets as Social spaces

2.5.1 Social characters

A place does not work if no one is there (Dobbins, 2009). The relationship between space and society is a continuous two way process in which people create and modify a space while at the same time being influenced by the condition of the space. It is difficult to conceive a space as being without social content, and equally to conceive of society without a spatial milieu. (Carmona and Tiesdell 2007)

The presence of large number of people makes markets liable to several activities in which a number of people are likely to be involved. This multifunctional character of markets is what makes it one important social space. As stated by Bohannan and Dalton (1962), the functions of market places go beyond the original functions. Though the main economic function of markets is commerce, market places also enhance social interaction.

The non-economic character of markets can also be identified as a social role. One character of market places is that it serves as the center of communication or news. This is largely due to the fact that it is a place with a gathering of a large group of people. Markets are important focal points where information is disseminated. (Teshahun 1993). The type of distribution of information can be either formal or informal. It can be in the form of announcements from chiefs, political leaders, priests or an informal mode of exchange of information which is gossip among friends as it provides a place for friends to meet. Bohannan and Dalton (1962) state it can be used for the recruitment of sexual partners or friendships in the society. Market places are centers where friends are to be met, sexual adventures are to be initiated and alliances are to be contracted (Teshahun 1993).

Markets are also important political centers mainly for the fact that the market itself is controlled by the leaders of chiefs. The market is used to demonstrate the ideas of both the society and the leaders. An important political consideration is the fact that a market is often used as the center for judicial activities. (Bohannan and Dalton 1962). The markets are chosen because the leaders exercise their power in front of a large group of people and the society, too, can lay a case to the leaders in an informal manner in front of a large group of people. Locally it has been witnessed that local chiefs and judges exercise legislation in and around market places, where announcements or *Awaj* are told or justice is served.

The accompaniment of religious activities is another feature of markets. These activities pull each other mainly because both activities collect a large number of people. Teshahun (1993) states some Ethiopian indigenous markets were established near religious centers. They are also areas where informal or formal religious authorities announce messages to people.

The indigenous Ethiopian markets have also owned such characters. It makes markets to be a multi-functional space with qualities that go beyond what they are established for. These interactive social qualities make markets unique and vibrant social spaces.

2.6 Spatial characters

2.6.1 Spatial features

Since the development of the Greek market place called Agora, markets have been one of the most significant urban spaces. Market spaces were areas of commerce, government, assembly and interaction. These spaces create an image for the city in which they are located; they become a meeting place and a center of various activities that can improve the physical and social environment. (Harvey 1992).

Source: A History of Architecture, 1996

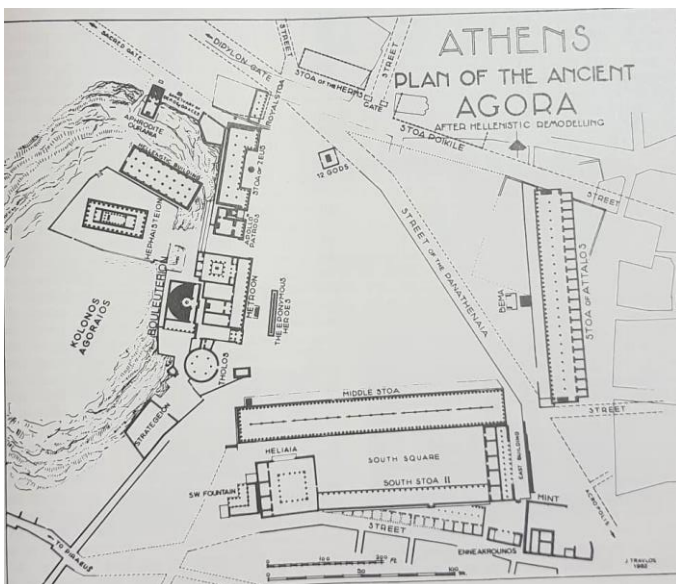


Figure 2.5: Plan of the ancient Agora

Though the evolution and process of development varies, the significance of market places as an economic and social spaces is true for many developments. Organized market spaces are among the most prominent locations of economic and social activity in contemporary Africa. (Bohannon and Dalton, 1962)

Markets play a key role in the development of a country's economy. But, it is also an area where social and political activities used to take place.

... I must go to the market, and when I get there, I look for three persons; my girlfriend, my debtor and my enemy. ...and when I go to the market and do not see them all, the market is not good (Bohannan & Dalton, 1962)

2.6.2 Active engagement

Active engagement represents a more direct experience with a place and the people within it. This function has a number of components. One of these components is the desire of people to have more and direct contact with others, whether they are strangers in a site or members of their own group.

Carmona states in his book, (Carmona, et al. 2007) that people require activity, celebration and festivity. He claims that this kind of activity gives life a distinctive quality, it comes from engaging in a multifaceted activity that encompasses people-watching, socializing, being entertained, and consuming or buying food and other goods.

He also states for many decades this type of activity was characteristic of market areas. Many visitors to these market areas are primarily in search of bargains or particular wares, but others are seeking engagement with the diversity of sights, sounds and smells of these spaces.

While some people seek out settings in which to relax, others gravitate towards physical and social challenges, active engagement with the public place and its occupants including interaction with others, shopping and participation in street life. These places support discovery and enables opportunities for new experiences. Good places frequently serve more than one purpose (Carmona, et al. 2007). Market places have ideally been places where these various activities take place. The design of places should work towards making sure it reflects the purpose, the activities that take place and how people engage in the space.

2.6.3 Necessary, optional and social activities

Jan Gehl (Carmona and Tiesdell 2007) divides outdoor activities in public places into three each of which puts various demands on the physical environment. These are necessary activities, optional activities and social activities.

The first one is necessary activities. These activities are required activities that people, to a greater and lesser degree, participate in every day. The physical condition of the space in which these activities take place only slightly affects the existence of the activity for the activity itself is

necessary. It will take place no matter what the physical condition of the space is. The people have no choice but to undertake the activity in spite of the spatial condition. These activities take place with the same frequency it would have in a high quality of space but the people tend to spend longer time within that space depending on the quality of space (Carmona and Tiesdell 2007)

Shopping is one of the necessary activities people engage in. The market place is occupied with people every day. Whether the physical condition of the market is of high quality or not, the market is still occupied with people because shopping is a necessary activity and for lack of a better choice people are forced to go to the market. A market with better spatial quality is more appealing to people and people tend to spend longer hours in the market allowing the following two activities to take place which are optional and social activities. From the other two activities, this one involves walking to a greater extent.

The second one is Optional activities. These activities take place in situations where there is an optimal exterior condition where the physical condition is inviting. Optional activities take place when situations invite people. (Carmona and Tiesdell 2007). These activities in the market, generally, include activities that take place before or after long shopping hours such as recreational activities, sitting or walking. A good quality market place allows the activity to go beyond shopping and invites people to stop, sit eat, play and so on.

The third are Social activities. These activities are basically dependant on the presence of others. They occur as a result of people being in the same place which requires other set of activities which brings people together. This implies that these activities are indirectly dependent on necessary and optional activities. (Carmona and Tiesdell 2007) In market areas, social activities take place highly because of the presence of large number of people. These activities include children at play, greetings and conversations and passive contacts such as seeing and hearing other people without interactions.

All of these characters can be seen in the market spaces. It is a necessary activity as shopping is an activity that is required in the lives of people. Because it is a necessary activity and usually has a large group of people in a place at a time, social activities also take place. People see, meet and interact with one another. In relation with these two activities and depending on the quality of space, optional activities also take place. After long hours of shopping people tend to need to rest,

sit, eat, refresh and allow their children to play around in the market. The length of time people stay in a public space is a function and an indicator of its comfort. (Carmona, et al. 2007) The comfort of the space is one aspect that is needed in order for the space to be used efficiently and to its full extent of its qualities.

In the Ethiopian context, markets are basically used for the purpose of shopping. Basically, this makes the activities in the market necessary. In spite of the level of comfort in the market, the activity of shopping takes place. These markets tend to be a space of social activities for the reason of attracting a large group of people, at a time. It is also a space of an activity where people tend to exercise each other. This social activity is mainly driven by the necessary activity, i.e. is shopping. Optional activities are hardly a concern in the design of markets. Physically, the design is mainly focused on the process of shopping. This does not invite the shoppers to stay in the market for a longer period than the time that they necessarily need to take. Recreational activities are done out of the market space, after shopping.

2.6.4 Contemporary VS Open markets

Markets have, for a long time, existed as open outdoor spaces and still in some areas continue to be found in the outdoor areas, where the exchange of goods takes place. Market places have been, and still are public spaces that support active engagement that can occur between people since people prefer using public spaces so as to be able to interact. Open markets are preferred to ensure a high level of interaction, socialization, site's diversity, sounds, bargaining and for the unpredictable events that may take place.



Figure 2.6: A mall in Dubai



Figure 2.7: An informal market in Addis Ababa

In recent years, with the establishment of contemporary market types, open markets are seen as backward and undeveloped. Malls, supermarkets, hypermarkets are replacing the open markets. The way open markets are tended to is, now, being seen as undeveloped and retrograde. This view has led to the conception of traditional markets as they are being seen more related to urban squalor and mass poverty. (UNECA 1997).

Most of the markets have the character of having people with poor living conditions, setting shelters and working in densely populated areas. They are largely located in environmentally vulnerable location with poor waste disposal system, inadequate water supply, and poor infrastructures with poor maintenance. The lack of attention given to such markets has resulted in pollution, uncomfortable working and living conditions and traffic congestion. These conditions have resulted in these markets being seen as ruining the modern images cities should create.

Because of the high levels of urbanization, concentration and economic conditions, these markets are organized informally. This is due to the lack of provision of proper market spaces, scarcity of land, substandard working and living areas without proper provision of infrastructure. The increasing number of informally organized markets and the environmental impacts result in congestion and pollution creating unhealthy working environment. (UNECA 1997).

On the other hand, the increasing impact of these informally organized open markets has become a pushing force towards a contemporary market culture, such as malls, supermarkets, hypermarkets. Carmona calls these contemporary markets, highly designed, largely artificial and costly to use 'market places'. He claims that these markets lack the liveliness, disorderliness, and unexpected possibilities. (Carmona 2007). In character these markets have much less social diversity and exchange (Carmona 2007). Since these markets places are costly to use, they segregate a certain group of the society that cannot afford it which limits the social diversity. The character of these informally organized markets, such as the bargaining, the overcrowded roads and the diversity of the people in the area is a character of the market that should be maintained. It is a character that clearly reflects the living conditions, the social character, levels of interaction and integrity for a city.

2.7 Markets as economic spaces

As it has already been mentioned, the main function of markets is commerce. The trends and the market strategies have changed through time. With the high level of urbanization and the development of new regulation and issues of licensing, these market systems started to evolve changing the indigenous characters of traditional markets.

Contemporary market cultures, such as malls are nowadays seen replacing the open markets. Though these other forms of markets are in some aspects acceptable and has positive developmental implications, the traditional character and the qualities that is seen in open markets, especially the economic, social and spatial characters, are now disappearing.

One of the reasons for this to happen is the issue of informality. The UN defines the informal sector as result of the public administrations, emphasizing on the legal status, particularly regarding registration and taxation. The informal sector can generally be considered activity or enterprise which does not comply with established business regulations. (UNECA, 1997)

2.7.1 Informal Markets

The existence of informality and the term informal is perceived being similar for most of the countries. Nowadays, economic activities that are referred as informal have existed for a long period. Through time, the modes of exchange, technical advancements, needs and consumption of people and development have created a different image in this sector. Informal markets and the practice have always existed and continue till today.

During colonial times, the existing administrations and governments adopted what was considered modern technology and administrative strategies. This was done for the smooth running of the economy and the protection of the public. This affected the people's economy since the enterprises were dominated by large foreign force with a technology that was unfamiliar to the people. This required large investment and they competed for the business. Whereas, government were in favor of the large enterprises for which they offered better privileges and incentives. The people, therefore, faced a system that was not either suited for their needs or in line with their capacities. (UNECA 1997)

For the new regulations imposed on the people were too complicated, difficult and costly to comply the people kept doing business as usual, but tried to stay invisible to the government. This is what, gradually, came to be known as the informal sector. The informal sector has not been born as a step-brother to modern enterprises but existed long before as the people's economy. (UNECA1997).

The informal sector emerged as part of the process of economic restructuring and cooperate austerity policies and as a reaction against state regulations in terms of taxes, social legislation, health and environmental controls. (Asmamaw 2005) It can be said that informal sector is an employment that is not registered and that functions outside of state regulation. The actors in this sector sell their goods and services in a market that is unregistered with none or very few hired workers.

2.7.2 Positive and Negative aspects of informality

Though, situations are different according to the context, different studies show that small scale size, avoidance of state regulations, flexible sites, use of family labor, unregulated production and distribution are common to all informal sectors. The fact that these open markets are part of the informal sector is now leading for the change in type of development of markets.

Source Inclusive urban management in Lagos: a case for street traders' survival, 2016



Figure 2.8: An informal market in Lagos

The physical and environmental consequence of the informal sector has created the controversy on one side being considered illegal or marginal and on the other productive. It is partially considered as a sector with poor living conditions, low productivity and poor management of resources. Operators doing business in the streets, around city corners and congested parts of cities are alleged to be spoiling the modern face of cities. (Asmamaw 2005).

In some aspects, these markets are claimed to be overcrowded, with poor living conditions, poor sanitation and waste disposal methods, poor infrastructures inadequate water supply and polluted environment. Other than the environmental and physical challenges, these traditional markets are claimed to be backward and threatening the modern image that cities should create.

a. Positive aspects of informality

On one hand, the character and type of development of recent markets is completely different from the traditional and in many ways not built for the poor. These traditional open markets are places where the poor can easily sell and the poor can buy. Across developing regions, between 30-40% of the urban poor depend partially or entirely on the informal sector for their livelihood. (UNDP,1997). In developing countries like Ethiopia this sector can be regarded as a foundation for economic growth. (Asmamaw 2005). This can be said because it opens up opportunities for entrepreneurs and prospects for self-employment.

Generally those involved in open traditional markets have opportunities of being employed. It can be used as a means to mobilize locally available resources and put to positive use. In Ethiopia, it has been seen to decentralize business activities, and provide linkage between rural and urban communities and support entrepreneurial spirit (Asmamaw 2005)

UNDP calls it a survival strategy while highlighting on the key issues and the characteristics for the urban poor especially in times of economic crises and claims that it can be used for poverty alleviation.

Urban poverty is a characteristic of most third world countries. In terms of poverty reduction the informal sector needs to be supported and developed because it contributes much to the urban economics. Various different strategies can be employed such as: at a micro level can be credit, micro and small scale enterprise development, community participation and upgrading. The

informal sector can be used as a way to create employment opportunities and increasing income and assets for the poor.

b. Negative aspects of informality

Actors in the informal sector are self-employed, individuals with limited hired force which is largely composed of family members who are paid in minimum wage. The low capital and the lack of improved technology make this sector less productive. This results in low and irregular incomes with inconsistent income and unstable conditions. And since they are not recognized or supported by the government they are not protected by law. They do not have access to organized markets or services provided by the government such as credit institutions, formal education and training. They usually operate in the underdeveloped parts of urban areas with bad working conditions, low infrastructure provisions, low level of hygiene, unhealthy conditions, insecurity, lack of safety and unstable locations. Generally they are outside of government regulation or benefit and one of this is tax evasion.

2.7.3 Integrating the formal and the informal: creating an enabling environment

The positive aspects of traditional open markets and the development qualities of informal sectors for economic development can be seen especially in terms of creating employment opportunities for the large urban poor and its impacts on urban poverty alleviation. It is obvious that this sector is important for a developing country like Ethiopia and requires support from the government instead of working towards a complete eradication of this sector and those who are involved in it. The state should focus on policy and physical intervention methods or urban design techniques which can assist those that are involved in these markets. Governments need to serve as facilitators in the attempt to intervene to help it grow in a way that would not affect the sectors dynamism and the innovative capacity (Asmamaw 2005)

One method can be to create an enabling environment that can easily support the development of these markets and a transition in to making it to a formalized market spaces. Enabling environment can be a physical setting which includes proper design of spaces with all the required services and infrastructures to reduce congestion, pollution, inappropriate use of spaces and to increase convenience, comfort and ease for shopping.

Another feature of creating an enabling environment can be enforcement of appropriate policies in regard to ownership, finance, and services. Creation of favorable legal conditions which recognize these informal markets and support it through establishment of cooperatives, joint marketing, provision of spaces for training, fund schemes, government funding programs and strong micro finance institutions are also part of the creation of an enabling environment.

2.8 Integrated urban design for informal markets

2.8.1 Pro-poor policies

Goran Tannerfeldt and Per Ljung in their book *More Urban Less Poor* (Tannerfeldt and Ljung 2006) claim a large number of the urban poor are dependent on the informal economy for their daily incomes. In the same manner, it serves as a service for the large number of the urban poor at a cost that they can only afford. In this regard, these markets should be seen as potentials for economic development and not problems in the society and urban areas which has now become the common understanding.

Local government can do a lot to reduce the costs and risks of working informally. (Tannerfeldt and Ljung 2006). With the development of the right kinds of policies that support those that work informally, the conditions of working informally can be transformed towards economic development for the country. The policy led out should be enabling instead of restricting, which in the end is a restriction that is unrealistic and a rule that is to be broken.

- Regulations which prohibit or restrict home based business should be revised. (Tannerfeldt and Ljung 2006).
- In order to understand and be able to respond to the needs and concerns of the informal economy, the authorities should support organizations of informal sector workers, and establish dialogue and working partnerships with them. (Tannerfeldt and Ljung 2006).
- Incorporate informal economy improvement with other projects such as housing, infrastructure and construction. This will not only improve the housing and infrastructure conditions but also increase their incomes. (Tannerfeldt and Ljung 2006).

- Urban agriculture, commercial production of vegetables and fruits is also an option. It could be done in a small scale by being small backyard farming or a bigger scale. Considering urban agriculture as a small scale agricultural production, it is important to allow and encourage the publicly owned land to be used for this purpose. (Tannerfeldt and Ljung 2006).
- Micro financing is also essential. It can be used to financially enable, support competitiveness, create financial stability in the working conditions and create employment opportunities for others in urban areas.(Tannerfeldt and Ljung 2006).Financial services also exist in the informal economy from community associations in the form of Edir and Ekub. This can be used as a financial support that is done between the traders themselves.

2.8.2 Local Building materials and construction techniques

a. Bamboo construction

Bamboo, being available as a renewable resource in the Eastern Africa, is a building material that can be used to reduce the scarcity of building materials. Research made by bamboo practitioners has validated that when treated and used properly, bamboo is found to be structurally sound. (Jacob K. et al. 2011) It is a material that is still being researched. Methods developed to make it more resistant to insect attack, fungi and fire, are still in progress. Suitable areas that are identified to grow bamboo in Ethiopia are Sidama and Asosa. (Jacob K. et al. 2011)

Since this material is versatile, light and strong, it is used construction of the houses in different parts of Ethiopia especially in the Sidama region. The people in this region have access to natural forest of bamboo. The bamboo house can last up to forty years with the outer layer being replaces every 15-20 years. The houses are designed with a pointy top and is designed to shed heavy rainfall.

Source: Bamboo round house by the Sidama people of Ethiopia, 2012



Figure 2.9: A typical Sidama house

b. Preservation & treatment

Chemical treatment is needed in order to increase the durability, fire resistance and the service life of bamboo so as to be able to reduce the attack of microorganisms. Even though, several traditional (non-chemical) and chemical preservation techniques can be used chemical treatment techniques are more effective while treating bamboo than the traditional one.

Several techniques are equally effective in making bamboo resistant to microorganisms but some are easier than others. (Jacob K. et al. 2011). Of the several techniques, Open tank method for cold soaking is easier in terms of its being simple economically feasible. Fire retardant treatments are also required to make the bamboo safe since it is susceptible to fire.

c. Open tank method for cold soaking

This method involves a process through which culms, which have been prepared to a certain size are submerged in to a solution of water soluble preservative for a period of several days. The solution enters the culms from the sides and edges through the process of diffusion. The culms are then left to slowly dry.

d. Fire retardant treatment:

This process involves the treatment of bamboo with a combination of fire retardants and preservative chemicals. The preservatives will be made soluble in water and then bamboo is

submerged in the chemical. After this process, it is left to dry. Finally, Split culms will be treated more effectively since the inner skin is more permeable than the outer part.

2.8.3 Taxation

When working towards integrated urban design for informal markets, a certain level of formalization is required. The formalization of these markets requires for this sector to be legally recognized by the government. Informal markets benefit in two ways from paying taxes: one is that it increases the government revenue and the second being it allows this sector to be recognized as a legitimate source of economic activity which implies that these markets will be included in economic infrastructure, services, and other development initiatives.

Effective taxation of these informal markets requires better tax policies that are for one affordable for the payers. It should also be attractive for the tax payers in a way that they can clearly see where their tax money has been made effective use of through the provision of essential services such as water, sewage systems and security. This will reduce the resistance towards paying taxes and it will also ensure reliance.

The most effective method to raise more revenue from these markets is for the government and the markets to work towards employment and lucrative businesses. These include improving business environment, improving tax audits, monitoring the enforcement of tax compliance, and incentives given to the markets for tax registration. Education should also be given on tax compliance and on how tax can contribute to the improvement of public good and for provisions provided.

2.9 Summary

Markets have a long history in Ethiopia. Cities and towns developed as a result of market growth. They were not only places of commerce but also places where every imaginable activities that involves a large number of people used to take place. This includes social activities among groups of people as well as administrative system.

These markets have existed as open outdoor spaces. Through time with the change of administration and business regulations, these markets came to be known as informal. These places have a large number of the urban poor as well as a number of entrepreneurs who have created a

job for themselves in bad conditioned urban areas. It can be used as a way toward socio-economic development.

These markets have spatial and functional qualities of both active and passive engagement. The markets should be spaces that are appealing enough so not only necessary activities but also social and optional activities can take place. They bring people from different social conditions and interact daily.

The idea relates these markets to urban squalor and the physical condition is poor for it to be used has also been put forward. The poor physical conditions such as infrastructure, sanitation and poor maintenance makes these markets uncomfortable and unhealthy to work in.

The way forward should be towards creating an enabling condition for the traders to work in without restrictions from government. The traders should be supported by creating a comfortable physical condition to work in with infrastructure and ease for shopping. The policies should also focus on allowing the traders to work by giving them ownership of proper working spaces, and funding schemes that can support them financially.

With the proper design the preconceived ideas that these markets are ruining image of the city should change and should actually be seen as spaces that can actually reflect the culture and living condition of the city dwellers.

2.10 Market in the global context

2.10.1 Introduction

In this section a relevant case study will be conducted in light of the research question and objectives. A case study from South Africa is presented showing a market from the central area of the city of Durban. It identifies the process through which this market changes from an inefficient, unsafe and with unsanitary conditions to safe and accessible market space that is user friendly with the high volume of traders addressing issues of sanitation, cleanliness and crime.

Source: Asiye eTafuleni 2010



Figure 2.10 Site view of Warwick Junction market

2.10.2 The Warwick Junction market in Durban, South Africa

The Warwick Junction Urban Renewal Project was organized in response to the urban management and design issues that resulted from increased taxi and street trading activity at a primary transport node located in the South African city of Durban. Asiye eTafuleni (2010) calls it the only informally structured market in a public space of this magnitude that has established itself as the single most authentic African market that South Africa has to offer.

2.10.3 Key functions

The markets of Warwick Junction are composed of nine markets that are distinct yet connected. These markets include Bovine head cooking market, early morning market, Berea station market, Brook street market, The Music Bridge Market, Impepho and Lime market, Bead market, Victoria Street market and Herb market.

2.10.4 Lessons learned

- Though the market activities are dynamic the urban design achieved to make the market a homogenous entity with traders that represent diversity.
- The interest of the traders was respected through shops designed for specific types of functions and designed a space that integrated their need for space with the urban design of the renewal area.

- The administration achieved their goal to create a more participative environment that worked with the street traders' interests.
- The diversity of the street traders and their needs resulted in a diverse market place with unique spatial planning.
- An urban design project that changed regulations and the preconceived ideas and thoughts that the informal market should be completely abandoned and the space should be used for other purposes.
- The spatial design brought about a change in infrastructure and created a safe and accessible market space.
- The urban design solutions given made the space user friendly for the customers and traders.

Source: Asiye eTafuleni 2010

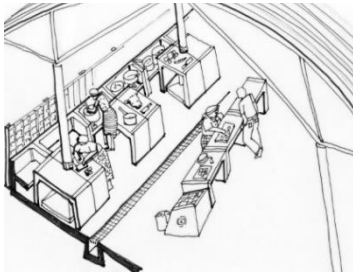


Figure 2.11: Sketch of cooking space Bovian Head cooking space, View of Herb market, View of Bead market,

CHAPTER 3: CASE STUDY

3.1 Introduction

This chapter covers an analysis of the current conditions of open markets taking the case area of Agoza Gebeya. It covers a background study of the market including its development and current conditions and physical setting and integration with surrounding areas. It includes the analysis of the data collected from government agencies, Agoza Gebeya Traders' Committee, individual traders and customers through interviews and questionnaire. Survey of the physical environment is done through visual survey including photographs, which have been interpreted to written data and maps.

The analysis covered in the chapter is interpreted through the key issues of spatial and physical conditions, economic conditions and social activities from the above mentioned data sources.

3.2 Location

Agoza Gebeya is located in Kirkos Sub city, Addis Ababa, on Haile Gebreselasse road. It is found behind Haile Gebreselasse building and adjacent to the river Kebena. It is located in a central area of Addis Ababa.

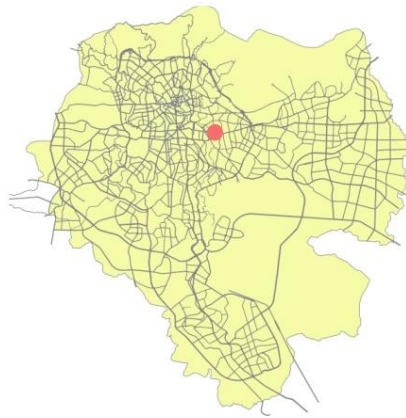


Figure 3.1 Agoza Gebeya in relation to Addis Ababa

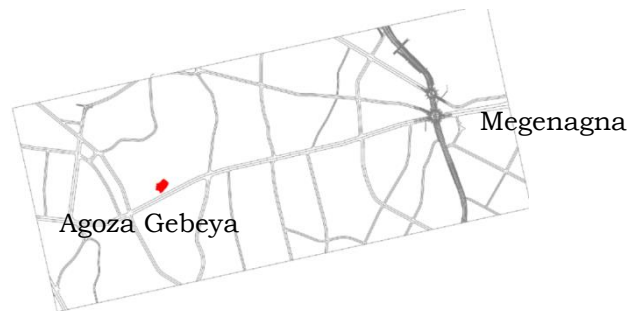


Figure 3.2 Agoza Gebeya road network





Figure 3.3 Location map of Agoza Gebeya

3.3 Site Description

3.3.1: Background

Agoza Market (Gebeya) is one of the oldest and least developed markets found in Addis Ababa. It is located in a very unsuitable area by the Kebena River. It is a traditional open market. It was named after the carpets made from animal skin (Agoza) for there was a man there that used to sell these carpets in this market. (Report of Kirkos Kifle Ketema MSEs office, 2011) The market area used to be a completely open market. In order to improve the condition in that area and the income of the traders, in 2005, 309 shaded shops were built and transferred to the traders.

According to a study done by Kirkos Kifle Ketema's Micro and Small Scale Enterprise office (2011), the market has become a space that has increasingly become less and less active. Much of the traders are found to live in a very poor living conditions and are not able to sustain a fully functioning market area. The people in the surrounding area do not fully participate in the improvement of the market and as a result it has affected the successful development of the market, making it lose its quality as a space and also as a means of income for the traders much of whom have been there since its establishment.

Source: Google earth, 2012



Figure 3.4 Google map locating Agoza Gebeya



Figure 3.5 View of the market and the river



Figure 3.6 Haile Gebreselase Road

The designated function of the market is and has been commercial only. The shops are used as commercial spaces and function as purely commercial area without other attached functions.

3.3.2 Organizational structure

The individual traders of Agoza Gebeya are organized under a traders committee which works towards improving the working conditions of the market. This committee works with Micro and Small Scale Enterprise of Woreda 8. They work towards creating a better market area by maintaining a secure and safe working environment, making sure the shops are open on all days of the week, managing disputes between traders and generally handling all issues related to the market.

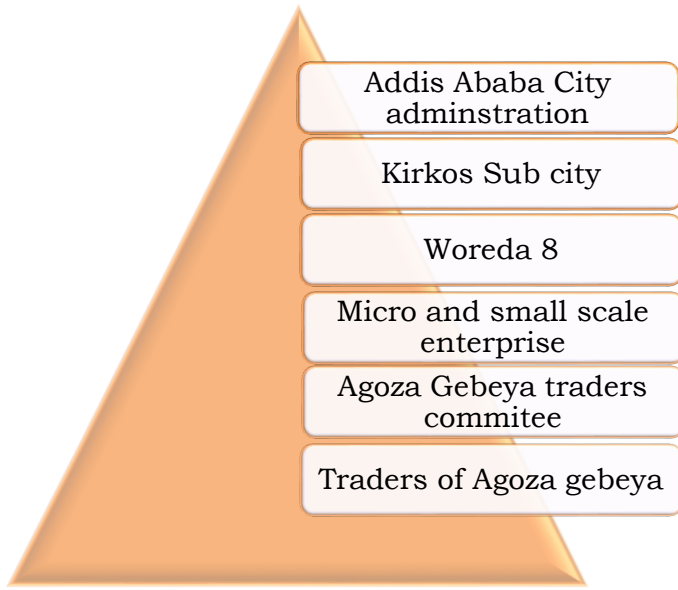


Figure 3.7 Organizational Structure



Figure 3.8 Agoza Gebeya traders committee meeting

3.4 Site location and integration

The roads from the site are connected to Kasnachis, Bambis, Bole and Megenagna by the roads found surrounding it. It is located in the city center and connected to other central areas. Though the market serves as a local market for the people of the surrounding area only, considering the location, it has the potential to serve other surrounding areas as well.

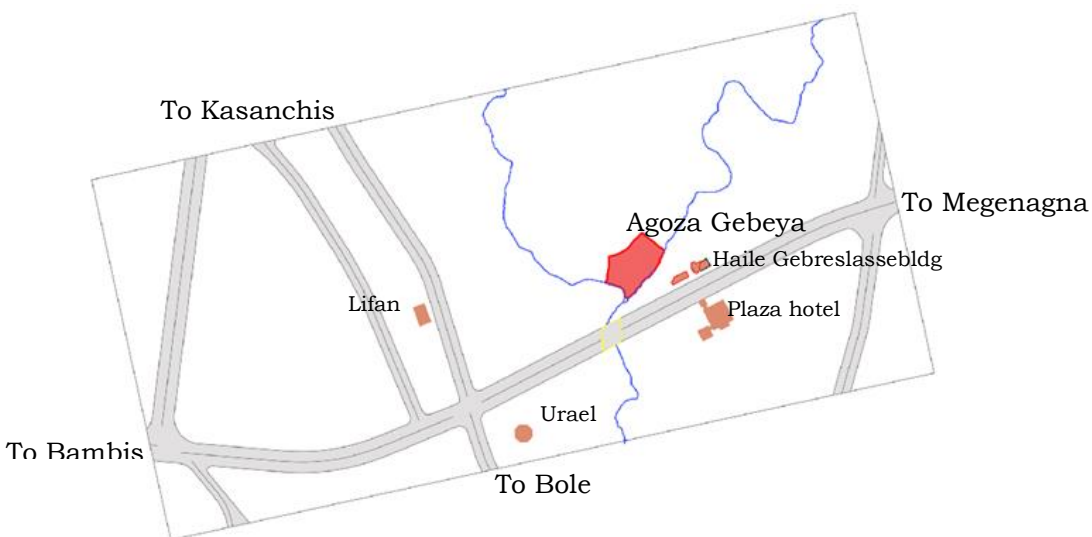


Figure 3.9 Site location



Figure 3.10 Road to Megenagna

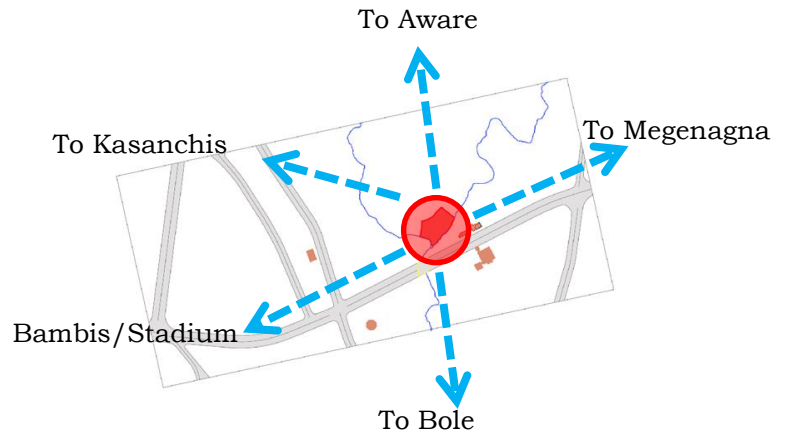


Figure 3.11 Integration with surrounding area

3.5 Spatial quality and physical conditions

The working conditions of the market and the level of comfort and convenience of the market is very low. The activity and vibrancy is decreasing every day. The traders themselves see the impact that the inconvenience and lack of comfort has on the vibrancy of the market and even on their daily incomes.

The level of activity and vibrancy in the market has been continuously decreasing in the last ten years. Particularly, eight years ago which was the time when the shades were built by the office of Micro and Small Scale Industries of the Kirkos Kifle Ketema, Woreda 8, 73% of the surveyed traders said that there has been a significant decrease in the level of activity in the market. (Refer Appendix D)

The traders of Agoza market mentioned different reasons as to why they choose this area for their business, refer Appendix D. For most of them that have been in the market for more than ten years, their reason is that the market was very vibrant when they first settled in that area. They also mentioned the centrality of the market as another pushing factor. Some of them mentioned that their business is not as much as it was before and they admitted that the reason that they are still in this area is for lack of any other optional space to work at.

Others that have joined the market in the last five years said that they chose this area for its centrality and cheaper cost of transportation. They also mentioned about the cheaper rental price as a reason which is around 40 birr per month. These two factors were found to be the main reasons for choosing this area for their business.

Proximity is also another aspect of the market that makes it attractive for business. 53% of the traders live in close proximity to the market while the rest 47% have to travel longer distances to come to the market. For those that live close to their business area, they save a lot of money on transportation unlike those coming from further distances. Those that travel longer distance still prefer this market because of its central location and they are able to get their essential needs in this area.

3.5.1 Physical Integration with surrounding markets

Agoza market currently has seen the development of other markets around it. These include the surrounding informal markets found along the main access points to Agoza market. Because of lack of better access to the market itself, other markets are being formed in the surrounding areas. One of these markets is located on one of the access roads to the market which is around the Urael church's Tsebel (Holy Water) area. This market attracts people that come and go from the church. The other one is located in front of Lifan motors building and is the second access to the market. It is commonly known by the name called the Arkebesuk. These shops were originally organized as formal and administered by the local government but are surrounded by other informal shops and work against the organizers of the Arkabesuk. The third one is known as Kebele 33 local Gultit. It is relatively smaller in scale compared to the other two markets. It is located on the third access to the Agoza. All of these markets are informally organized and located on the access roads to Agoza but are easily accessible because of location. These informal markets are found in close proximity to the market. The traders believe that these markets located on the streets to Agoza are one of the reasons that Agoza Gebeya is not active. The consumers find all they need without having to come to Agoza but on the streets. The number of people in these informal markets is increasing and the traders in these informal markets have shops in Agoza but the profit in the informal market is more than what they would get in Agoza market because of ease access. Both the traders and office of Micro and Small Scale Industries of the Kirkos Kifle Ketema, Woreda 8, mentioned in an interview that efforts are being made to include these traders in to Agoza market.

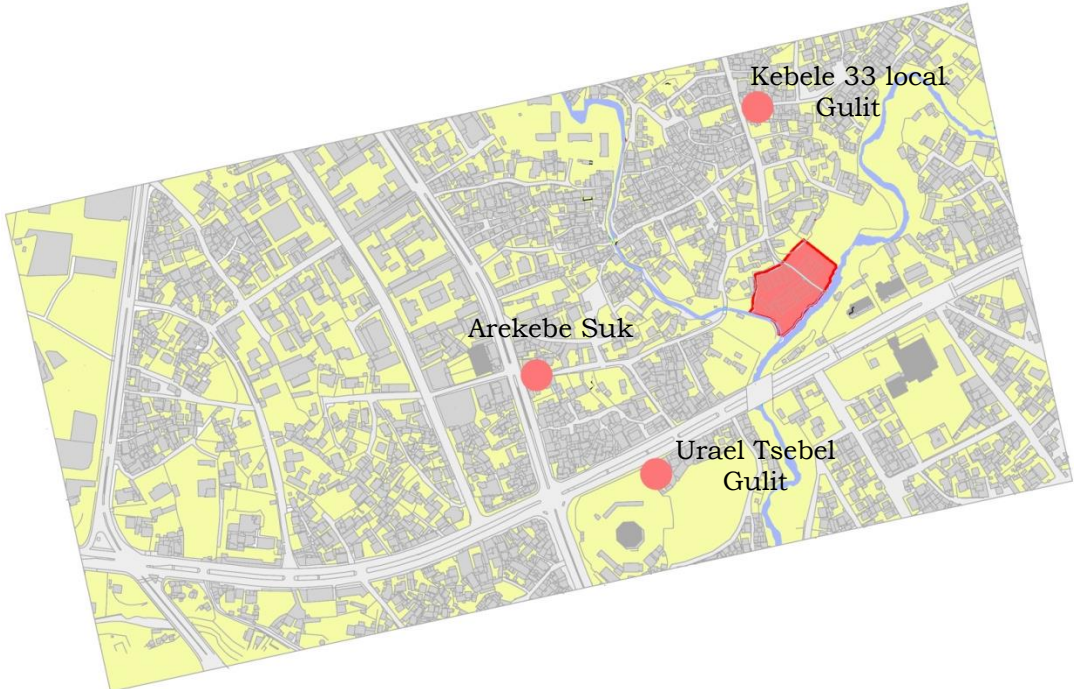


Figure 3.12 Integration with surrounding markets



Figure 3.13 Kebele 33 local Gulit

3.5.2 Road network

The roads to the markets are difficult to access especially by vehicles. The market has three access roads. All these do not have direct vehicular access to the market. Two of these roads have pedestrian and have bridges that cross over the river. One road is vehicular and leads half way to the market.

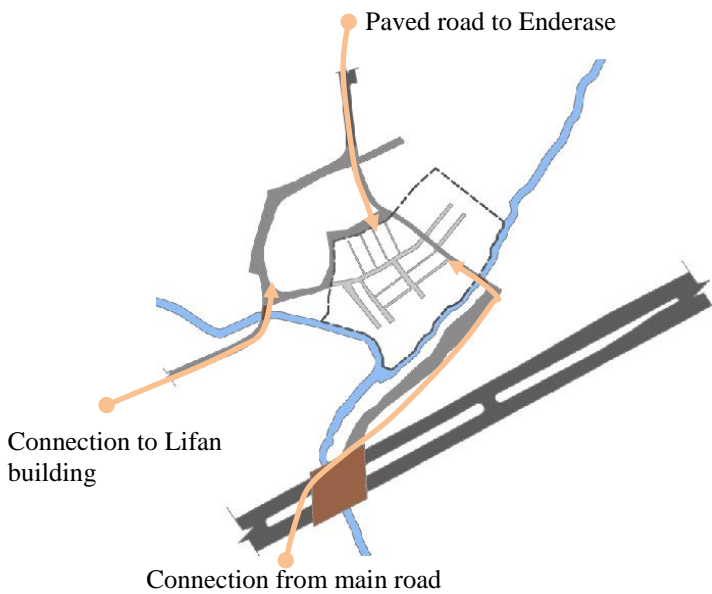


Figure 3.14 Main Access roads to the market



Figure 3.15: Bridge access from main road



Figure 3.16: Main road in the market

The access roads in the market are unpaved foot paths. The foot paths that connect the shaded shops are narrow in size, because the space in between the shops that was originally planned as a walk way is taken up and used as display area.



Figure 3.17: walk ways used as display area

The connection from the main road is also a walkway that is unpaved and narrow which is 1.5m in width and through this a pedestrian bridge can be accessed. This road is used as an alternative access by the traders to bring in their materials. There are daily laborers that carry materials from this point to the shops. This road has the river and trees on one side and a retaining wall on the other. The trees completely cover the market and make someone feel unsafe.



Figure 3.18: Vegetation that covers visual permeability to the market

The only paved access to the market is through the road from Enderase. This road is mainly used by the traders to bring their goods to the market. The traders use laborers to carry their goods from the main unloading area which is 145m away from one side of the market and 30m away from another side the market.

The condition of the roads is one factor that is affecting the market activity. The difficulty of access is one reason for the lack of activity and vibrancy of the market. The traders nowadays have other jobs or work in other markets. The lack of convenience of the roads and the difficulty for access especially by vehicles is one reason the traders believe is causing the lack of commercial activity. In relation to the roads, the location of the market by the river makes accessibility more difficult.



Figure 3.19: Primary Arterial Road



Figure 3.20: Paved road to Enderase

3.5.3 Visual and physical permeability

The trees found aligned with the river and the access roads create a visual barrier. The topography also makes it difficult to see the market from certain locations while giving a clear view from some locations.

Lack of visual and physical access is one issue the traders believe is worsening the increased lack of commercial activity. The lack of visual access to the market from the main roads and the fact that the market is surrounded by different types of vegetation is one reason that people do not know about the market. When seeing the physical access the roads to and through the market are

pedestrian only and the traders have difficulty bringing their materials to the market and the consumers also have the same difficulty.



Figure 3.21: Vegetation that are physical barriers



Figure 3.22: Location with clear view of the market

3.5.4 Commodity zoning

There is no clear distinction between the materials sold and the locations where different materials with different distinctions are found. This is confusing to the customers for there is no clear image as to what can be found where and it also creates uncomfortable conditions for the traders. Some traders complain that they are forced to sell food stuff next to a shop that sells charcoal which is unhealthy and unsanitary.

Some manufacturing areas are found in this market which includes metal work, wood work and bamboo. Food stuff includes food preparation, herbs, and legumes. Cloths and shoes area includes tailoring, laundry and selling.

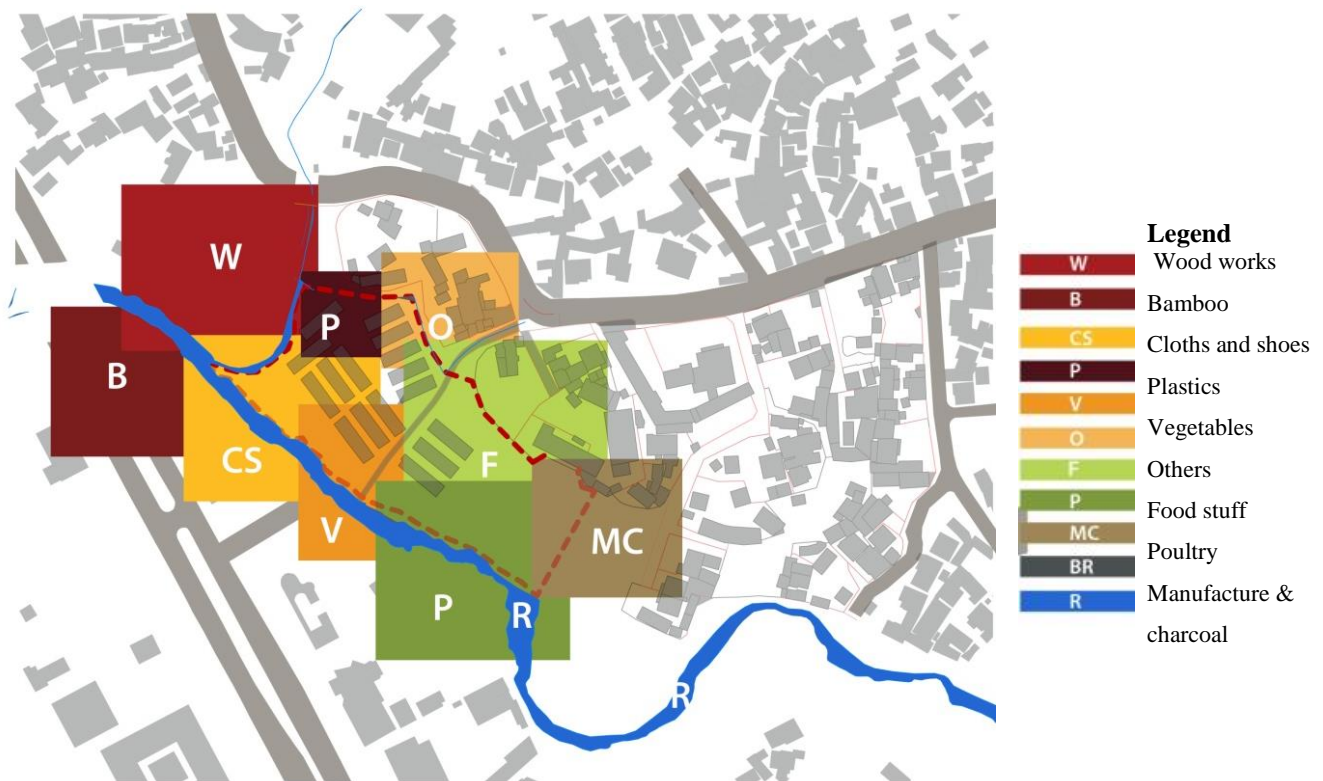


Figure 3.23: Commodity Zoning



Figure 3.24: Recycled materials & Food stuff found with household

3.5.5 Use of outdoor space

Because of lack of proper interior space, the outdoor space is used for various functions.



Figure 3.25 Use of outdoor space

Metal workshops use the outdoor space for manufacturing and storage. Wood is also sold in this space along with recycled and repaired materials. Use and throw plastic bottles are also collected and sold there to be recycled. Charcoal and Kubet are also made, left to dry and sold in the outdoor space. Bamboo furniture are made and displayed and sold. Some of the food stuff, like pepper are also processed and left to dry in the outdoor areas



Figure 3.26 Working space for metal work and wood work

3.5.6 Shop layout

Each row of shade has 8 to 10 shops with an average length of 20 meters. Mostly the shops are also used as a storage spaces, since they do not have any space allocated for such a purpose. The shops are not suitable for display, and hence the shop owners are forced to use the outdoor space as a display area. The space between each row of shops, which was originally left as a walk way, is now used as a display area. The walk ways are too narrow having a width of 0.7mts for the reason of using the space because the space as a display area, of having a width of 0.6mts, on both sides. Each shop has an average area of 5m^2 (2.5×2) and 6.25m^2 (2.5×2.5). Though the traders use their shop as a store, the remaining spaces is not sufficient, so that they cannot buy and store a variety of commodities in bulk amount. As a result this scenario has limited their scope of supplying more items of goods to be sold in the market.

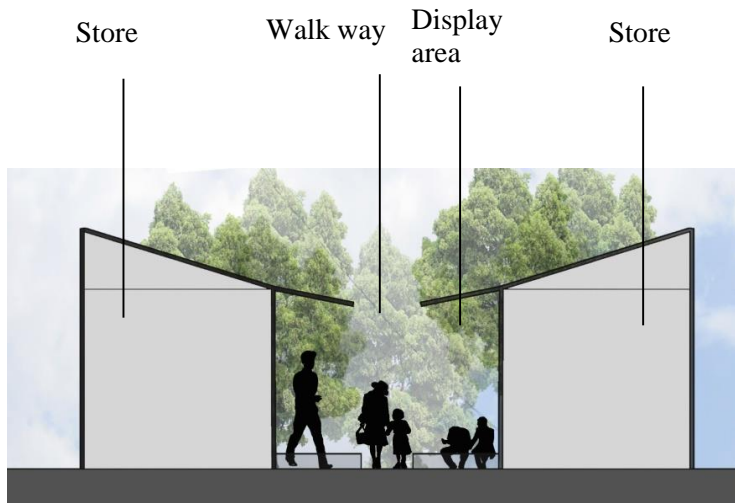


Figure 3.27: Section of the existing shop layout



Figure 3.28: Display area

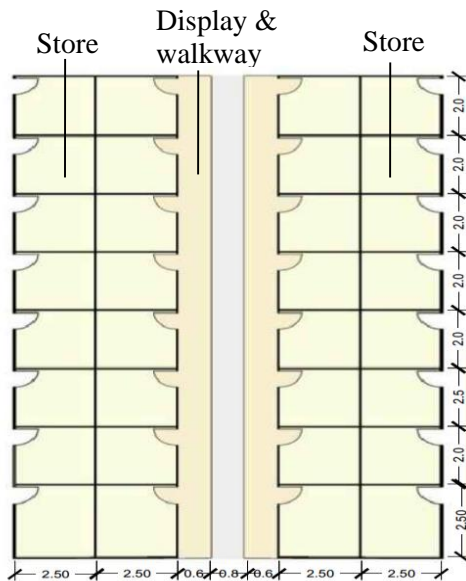


Figure 3.29: Shop Layout



Figure 3.30 Use of walkways

3.5.7 Proposed site integration

Agoza Gebeya is part of the Casainchis renewal project (2005). The Urban Plan Preparation and Inspection Department of the city has devised a local development plan for the area. According to the local development, plan Agoza Gebeya is to be maintained as a market, but the market is going to be relocated to another area that is reserved for market.

The relocation site of Agoza market Gebeya is located adjacent to the original market. This market is supposed to be integrated partially as part of the green buffer for the river.

The relocation site has a total area of 19 hectares. The surrounding open space has been integrated in to the proposed site. The existing road network and the bridges are also integrated in to the proposed site. (Urban plan preparation and inspection department 2005)

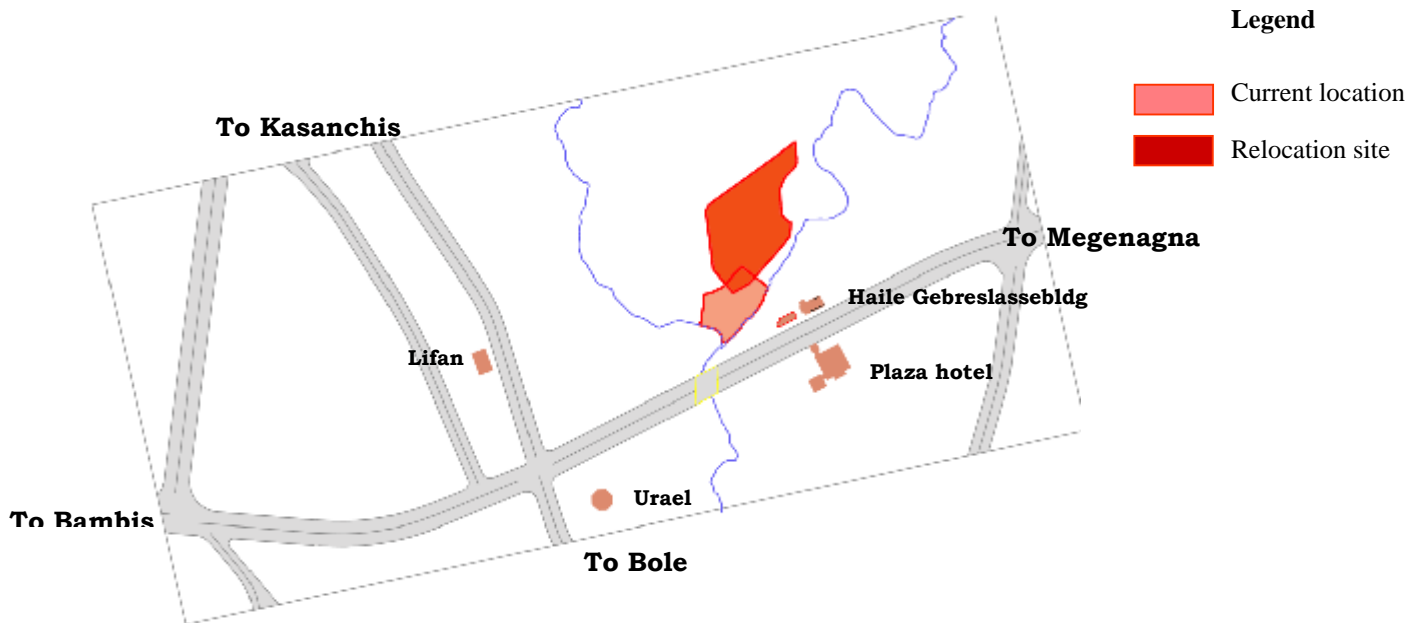


Figure 3.31: Agoza Gebeya relocation site



Figure 3.32: Current view of relocation sites

3.5.8 Site description

a. The residential and commercial area

Even though, this part of the site is a residential area, it includes other services, such as, commercial a small scale manufacturing one small hotel and a local police station. It has also a large vacant or left over space that has a potential to be used for future expansion plan of the market.

The residential area has limited visual and physical permeability. However, there is a vacant land from which there is a clear view of the market and the surrounding area, although there is only one physical access route. The residential zone is densely populated with so many attached residences. This space has still lacked a variety of activities. The view of the vacant land shows the unique character of the market, i.e. a clear sense of place.

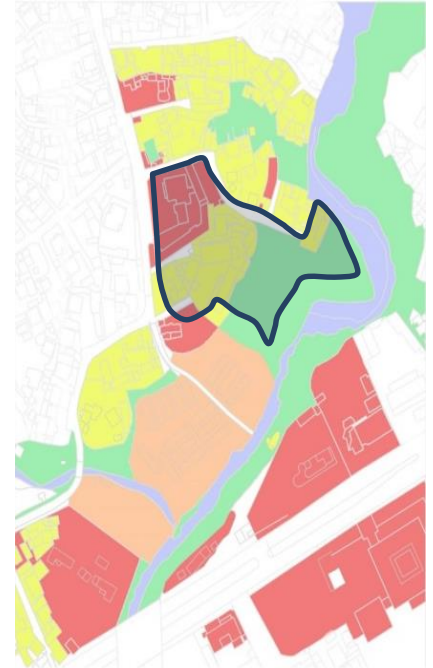


Figure 3.33: Residential and commercial area



Figure 3.34: View of Residential area and the vacant sites

b. The market

This is the location of the main market which includes shades having different commodities. The river divides the market in to two i.e. the main market and the wood work and wood market. The main access to the market is also found in this area. Much of the loading and unloading is accommodated here. The market itself has various activities and functions. Though the activity makes the market interesting, it also makes it lose its level of legibility. The market is a large space and accommodates all its traders sufficiently without being too densely occupied.

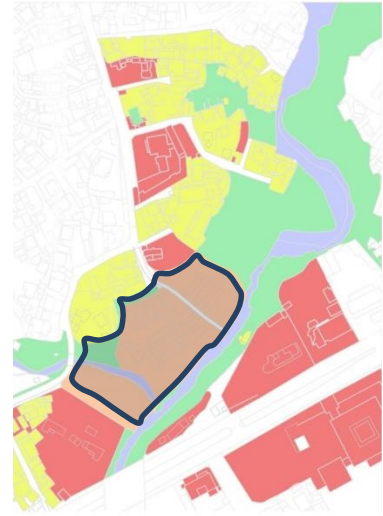


Figure 3.35 The market



Figure 3.36 View of the market and loading and unloading

c. The MSEs

This is an area found adjacent to the market at two sides. The first part has residential areas and the other includes a governmentally organized Small Scale Enterprise which basically works with poultry, although it is not very active nowadays.

This area does not have a variety of functions or activities. The residential area is only composed of residences. The residential area is densely populated at a small portion of the land. The character of the area is not uniquely identified from one place to the other and is not easily legible, mainly because of existing fences having a longer length.

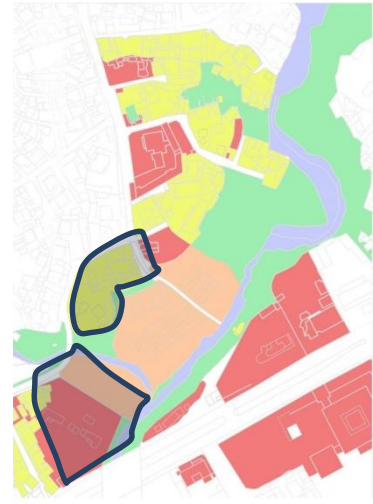


Figure 3.37 The MSEs



Figure 3.38 View of the MSEs



3.5.9 Urban Grain

The topography of the area limits the type and footprint of the built up structures. The built up structures are found scattered on the overall site, but also densely attached on certain areas, depending on the topography.

There is no clear arrangement of built up structures and open spaces. Some areas have a continuously attached and denser built up structures where as some areas have vacant or left over open spaces.



Figure 3.39 Urban Grain



Figure 3.40 Scattered



Figure 3.41 Densely attached

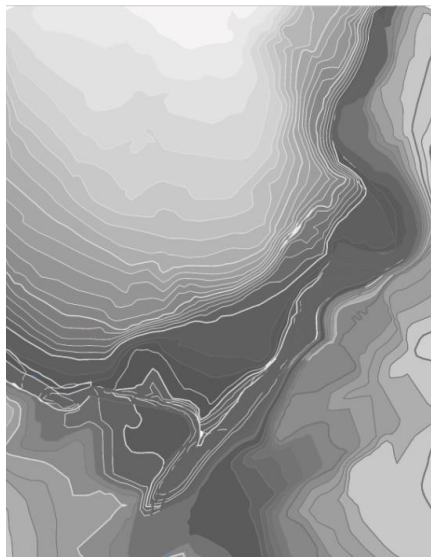


Figure 3.42: Topography

This is partially due to the topography of the area, which limits the locations on which construction can be made. Areas, where the topography makes it expensive for construction, are left vacant. The density of the area where the community lives together allows residents to have a communal lifestyle. Blocks that are densely constructed being attached together define one part of a community.



Figure 3.43: Arrangement of built up area

3.6 Economic conditions

The economic condition of the market is at this moment very poor and is increasingly deteriorating. The worsening of the economic conditions is highly related to the physical conditions. These two factors are related and one highly influences the other.

The main issues to be addressed when strictly dealing with the economic conditions in the market can be levels of supply and informality. These two issues can be guiding force for economic development in the market.

3.6.1: Commerce

Agoza Gebeya has different categories of goods and materials. Originally, the market was for vegetables, legumes and herbs, poultry, cloths, charcoal and some household materials. The hair saloon, tailoring, wood and metal work, Tej, Tella and food preparation are recent activities that

are available in the market and they have started which developing since a decade ago. The dominating goods sold include vegetables, legumes and herbs, cloths, wood and metal work together with recycled materials. Others such as the hair salon, poultry, charcoal and Tej, Tela and food preparation which are existing in the market are small in number.

Source: Survey Analysis

	Percentage (%)	Total
a. Vegetables	16.7%	5
b. Legumes and Herbs	16.7%	5
c. Poultry	6.7%	2
d. Hair saloon	3.2%	1
e. Tailoring	6.7%	2
f. Cloths	13.3%	4
g. Household materials	10%	3
h. Wood and metal work	13.3%	4
i. Charcoal	6.7%	2
j. Tej, Tela and food	6.7%	2

Table 3.1 Types of goods and materials

With the deteriorating condition in the market, the income of the traders is also decreasing. The shops are not open every day with in the week. Of all the 309 shops of the market, many shops are open on Wednesdays and Saturdays, since they are designated as official market days.

Much of the traders in the market do not open their shops on other days other than Wednesdays and Saturdays. The number of consumers is decreasing daily and the traders do not see any reason to be in the market daily, for the reason of not earning sufficient profit.

The traders who said that they work in the market only two days a week admitted their being working in other markets or have other jobs on the other days of the week. Some of the traders work in the market by the *Tebel of Urael*, some by the *Arkebe Suk* and others still work in the Sunday markets and claim to get more profit from these markets.

Efforts are being made by the office of the Micro and Small Scale Industries of the Kirkos Sub City, Woreda 8 to keep the shops open on all days of the week to oblige them working in the market on all days of the week. This is becoming an increasing cause of conflict between the traders and the office of Micro and Small Scale Industries and has not still solved the contradiction so far.

Because of the poor economic conditions in the market, 47% of the shops are rented out, while 53% are working in their own shops. This shows that each trader prefer to give his/her shops for rent offering lower price than to actually work in them. This is found to affect the market, because most renters are using them as workshops, hair salons, *Tej* and *Tela* places, which as a result is seen changing the character of the market. Especially, the *Tej* and *Tela* places increasingly affect the social character and acceptable behaviors in the market.

Lack of proper provision is also another problem that is seen in the market. Because the market does not provide variety of materials and the materials provided are in a smaller scale, the consumers do not feel that this market will sufficiently fulfill all their needs. The traders mentioned that this is due to the lack sufficient capital. They hardly make enough profit that can go beyond their own needs and cannot invest more on their market.



Figure 3.44: View of closed shops and roads

From the total number of customers used in the sample survey (Refer Appendix D), 56.7% admitted that they do not come to the market. They mentioned some reasons such as the limitation of materials, the difficulty of access, location by the river and the confusing and unplanned layout. They also mentioned the lack of feeling of ownership by the traders has limited the level of improvement. The chart below shows the major problems mentioned by the consumers and the frequency to which each was mentioned.

The traders believe that improving the physical planning and the organization of the market is one immediate improvement needed in the market. Better provision by the traders, improvement of the shops and roads and better business skills, which includes competitiveness among traders and with surrounding other markets was also mentioned. Refer Appendix D.

The increasing lack of vibrancy and deterioration in the market is a reason for concern. The traders have various reasons which they believe is the cause for the existing conditions. Those, that have been in the market 8 years and longer, explained that traders from surrounding areas of Addis Ababa, who they refer to as “The Oromo” who are the suppliers of agricultural products, do not come anymore. They used to come to the market on Wednesdays and Saturdays, and it was how the market days were established.

The number of customers was very high during that time and these suppliers from the surrounding areas of Addis Ababa, used to supply their goods in this market. This is mainly because of the fact that the number of customers that used to come to the market searching for their agricultural products was higher. The traders used to come with their goods loading them at the back of their animals and would go back after selling and buy in return materials they needed from this market. However, these suppliers were banned from coming to the market after the shades were built for the reason of formalizing the market.

The lack of convenience of the roads and the difficulty for access, especially by vehicles, is also a reason for the traders to believe as a cause for the lack of activity. The difficulty of access discourages customers from coming to the market. Together with influence of the roads, the location of the market being by the river side, accessibility is made more difficult because of the location.

Because of lack of better access in the market itself, other markets are being flourishing in the surrounding areas. These markets are located routes that take to the Agoza market and therefore the traders believe that this factor is a reason that takes away is taking away their customers into another market place. Refer Appendix D

3.6.2: Economic advantages

This market has existed for a long time and though the extent is not as it was before, there are some economic advantages. Much of the traders live in poor conditions and though it is not much, this market serves as a source of income. Without this market, one can conclude that much of the traders would be left without income.



Figure 3.45: View of market space

Among the advantages mentioned by the traders (Refer Appendix D), one is that starting a business in this market requires less investment. The advantage being that a small investment will be advantageous enough to start the business by anyone who prefer to work in this market.

This market, also, serves as a space where the poor can come to buy. The traders mentioned that there is a price difference between this market and others and this price difference is advantageous for the poor. Those, who rent a shop in the market, pay a lesser rental price, especially considering the centrality of the area.

The office of the Micro and Small Scale Enterprise claims that, 90% of the traders are legal for having a business license, since the time they were organized by Wereda 8. In the process of

formalizing the market, some of the traders were banned from coming to the market like those suppliers of agricultural products coming from the surrounding areas of Addis Ababa. These traders who are coming from surrounding areas of Addis Ababa had a number of customers. They were banned from coming in to the market for the reason of it being because it was believed to be difficult to keep track of these traders, who used to move and did not permanently stay in the market. It was believed difficult to keep their track and tax them formally. Another difficulty was that these traders used to come with their goods loading at the back of their animals creating a bad image for the city.

Though, the reason these traders were banned was to formalize the market, it has resulted in reducing the quality and the sense of variety in the market, since the supply of goods by the farmers has stopped. There has not been an improvement or change made to make up for the “The Oromo” people who were playing a bid role but were found to be banned from the market, so far.

In the process of formalizing the existing market, the shades were built and the traders were given business licenses so as to recognize them as a tax payer. The traders claim to have lost much of their investment and their profits due to high levels of taxation which they can no longer afford to pay. This has been mentioned as a reason why the traders are forced leave their shops that is found in the Agoza and started preferring to work in other markets. Refer Appendix D

Another factor is the influence of the surrounding informal markets. Because of the lack of better access into the market itself, other informal markets which are located in the routes accessing to the Agoza are claimed to take away their customers. Some traders of the Agoza market are seen to work in these markets and other markets, like the Sunday market, too.



Figure 3.46: Developing markets in the surrounding area

The process of integrating the market with the formal sector is not working to the advantage of the traders. It is instead making them leave their shops found in the Agoza market and leading them to the work in the informal markets that are created around. What is being done is forcing the traders to leave their informal locations and join the Agoza market instead of creating a more attractive working condition in Agoza market.

3.7 Social Activities

The type of activity in the market plays a significant role on behalf of considering the sex structure. 56.7% are female and 43.3% are male. When we look at activities, such as wood and metal work, poultry, tailors and charcoal traders, we can see that it is a male dominated activity. And other activities, such as the hair saloon, vegetables traders, cloths, herb traders and those involved in Tej, Tela and food preparations, are usually seen to be female dominated. This implies that this market creates job opportunities for the traders, especially for the female traders.

The age structure of traders of Agoza Gebeya can indicate that the age range of traders is mainly between the ages of 26-55 which is usually assumed to be an economically active age range. Much of the traders between the ages of 46 and above have been in the market for over 15 years and have established their livelihood in this market. There is a strong relationship formed between the traders and the market for those that have been in the market for more than 15 years. The relationship that they have formed with each other is one of the reasons why some of the traders come to the market every day. It has gone beyond their stronger working culture to a closer relationship, as a family.

67% traders have been in the market for more than 5 years much of whom have been in the market for over 10 years. For the traders that have recently joined the market, the advantage is mainly economical with low levels of rent and ideal location. For they have not been in the market long enough and they do not really have the kind of close relationship that old timers have.

This goes to show that there is a strong age group that can be used as a human resource in this market. These traders can increase production with their creativity. Those that have been in the market longer, can share their experiences and educate those that just started their business there.

When looking at the household size, 73% of the traders have families with 3 to 7 members. Much of these traders have been in this market for more than ten years and support their families with the income they get from this market. Supporting 3 to 7 members in their family is not an easy task, which is why most traders are forced to stay in the market for the lack of other methods to generate income. Those, that have less than two family members, are mostly the younger generation most of whom are involved in metal and wood work and have only been in the market for less than 5 years. This goes to show that a large number of family members depend on this market for their daily incomes.

From the total 30 sampled traders in the market, 20% are illiterate, 27% percent have primary education with their highest level of education, being 8th grade, 47% have their highest level of education at 10th grade and 7% have a diploma.

This gives an information to the research that there is a large number of traders that can easily be trained and educated. These traders have a basic understanding of how to run a business and therefore this can easily be improved by giving them a training to creativity together with productivity.



Figure 3.47: Activities of the traders

3.8 Social Qualities

The market still maintains with its own social qualities. Much of the traders have been in the market for over ten years and enjoy the relationships and friendships established between the traders in the market and between the traders and the customers.

Especially, for the aged ones, this is where they spend their days with their friends. There is good interaction between people. One of the quality that is mentioned by the traders and also by the customers is, that it serves as a social space for the traders and the people of the area.

It also serves as a space for everyone. No matter the economic conditions, age, education level or social status, anybody can go there to visit the market and buy. It is, also, not difficult to start a business with a lower investment requirement.

It has a history that dates back to more than 40 years. The traders, especially the elderly, have not only an economical but also an emotional attachment to the market.



Figure 3.48: Sitting space for traders and customers

Recently, the character of the market is changing. Market activities are changing due to the opening of traditional drinks, such as, Tej and Tela drinking places. Though it is a business for those that are involved in that trading, it has resulted in a socially unacceptable behavior in the market. Anyone can see a person drunk, walking around the market and disturb the people. Such kind of behaviors are unusual in the market place and brings the proper functioning of the market questionable especially if a number of these *Tej and Tela bets* (place) are flourishing.

3.9 Findings

3.9.1 Physical/ Spatial

- Problems of access and roads,
- Problem of visual permeability,
- Though the location of the market by the city center is ideal and makes it accessible from many surrounding areas, the location by the river inhibits ease of access and also has environmental implications,
- Lack of proper physical planning, such as lack of proper use of outdoor space, organization of shops and the use of interior space, services, such as storage and toilets are influencing the proper functioning of the market
- Though there is sufficient land and resources to work with, the poor economic conditions are leading to more traders moving away to other markets, more shops are closed or given off for rent and shops are abandoned.
- The market, because it is an area of shopping is a necessary space of activity. But, the customers come to the market only to shop and therefore, their activity is limited in the market. The physical condition in the market does not attract optional activities, such as places to sit, rest or recreational activities.

3.9.2 Economic aspect

- The manufacturing area though is a business which has now become a big business in the area, it is not helping the market or the traders. The traders do not get direct profit and do not sell it in the market.

- The banning of the moving traders, who have helped the development of the market, has now influenced the activity in the market and also has moved the traders from this part of the market.
- The methods used to formalize the market are making the traders move from the market and creating more informal markets. The traders are restricted from working in other markets.
- There has been seen a lack of business plan and knowledge and better business skills,
- It is a space where materials can be bought for less price when compared to other areas as a result it greatly supports the poor.
- Currently the market serves, although not efficiently, around 300 traders who are relying economically on it.
- The tax level that is imposed on the traders is becoming unaffordable, because of the economic conditions in the market,

3.9.3 Social aspect

- The very strong social interaction needs to be maintained and supported by creating more ways where they can interact daily and support each other.
- The long history and existence of the market to this day shows potential and need for the market.
- Though the condition in the market is not good, much of the traders prefer to stay in the market.
- Because of the strong social ties between the traders and the customers, there is a certain degree of social activity. The traders interact with the customers and each other. Their interaction is mainly active engagement and does not include passive engagement.
- The sex structure shows that the market creates job opportunities for the traders especially for the female traders.
- Household size shows that a large number of family members depend on this market for their daily incomes.
- The age structure implies that there is an economically active age group as a big resource for the market. Their young age and physical strength can increase production and creativity. The traders can also learn one another, especially those that have been in the market longer can train new comers.
- Their level of education shows the traders can easily be trained, educated and can improve the way they run their business.

CHAPTER 4: PROPOSAL

4.1 Concept Development

The data analysis shows that both the physical and spatial conditions in the market as well as the economic conditions are very poor. The number of people involved in trade should to the fullest extent, get the advantages of working in the market.

Making the market maintain itself as a fully functioning independent market can increase its independence. In order to develop a market that is independent, the goods that are sold in the market will be produced in the market. The traders will produce and sell their goods in the same market. This will give the traders full revenue from the materials sold, while at the same time giving them the skills of production.



Figure 4.1: The art of Pottery and weaving

- The traders will have a sustained income through creating a market that can be independent through production. The traders themselves will be equipped with the skills to produce and provide. This will enable the traders to be more beneficiary from the profits they made. It will, at the same time, give them the necessary knowledge of how they can produce and manage their finances. Through production, the traders will develop skills and different crafts which can attract people and tourists. They can also promote the making of various crafts and arts using local materials.

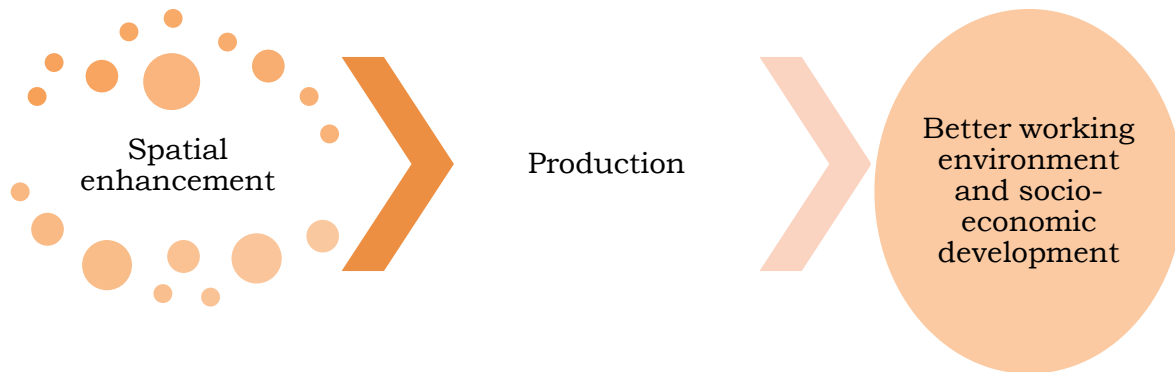


Figure 4.2: Concept Development

- The traders themselves will be recruited to work on the construction site and spatial planning by giving ideas of their needs and requirements or by working on site. This will help the traders to the fullest extent be a part of the market and the changes to be made. The participation in the spatial planning will enable the issues to be addressed to the fullest extent and at the same time, creating job opportunities. The traders will also get full responsibility and ownership of their market.
- The existing social make up and community association can assist the establishment of a financial support technique. This will enhance social interaction and at the same time, establishing a system through which the trading community can support each other, financially. For new traders that cannot afford to start their own business but are interested to be part of the market, simple structured shops will be provided. These shops will not require a large amount of initial investment and can be improved and made bigger through time. The improvements can be done by the traders themselves incrementally as they get more profit from the market. This will make it easy for new traders to join the market. These new traders will be supported while allowing them to be creative and develop their own shops.

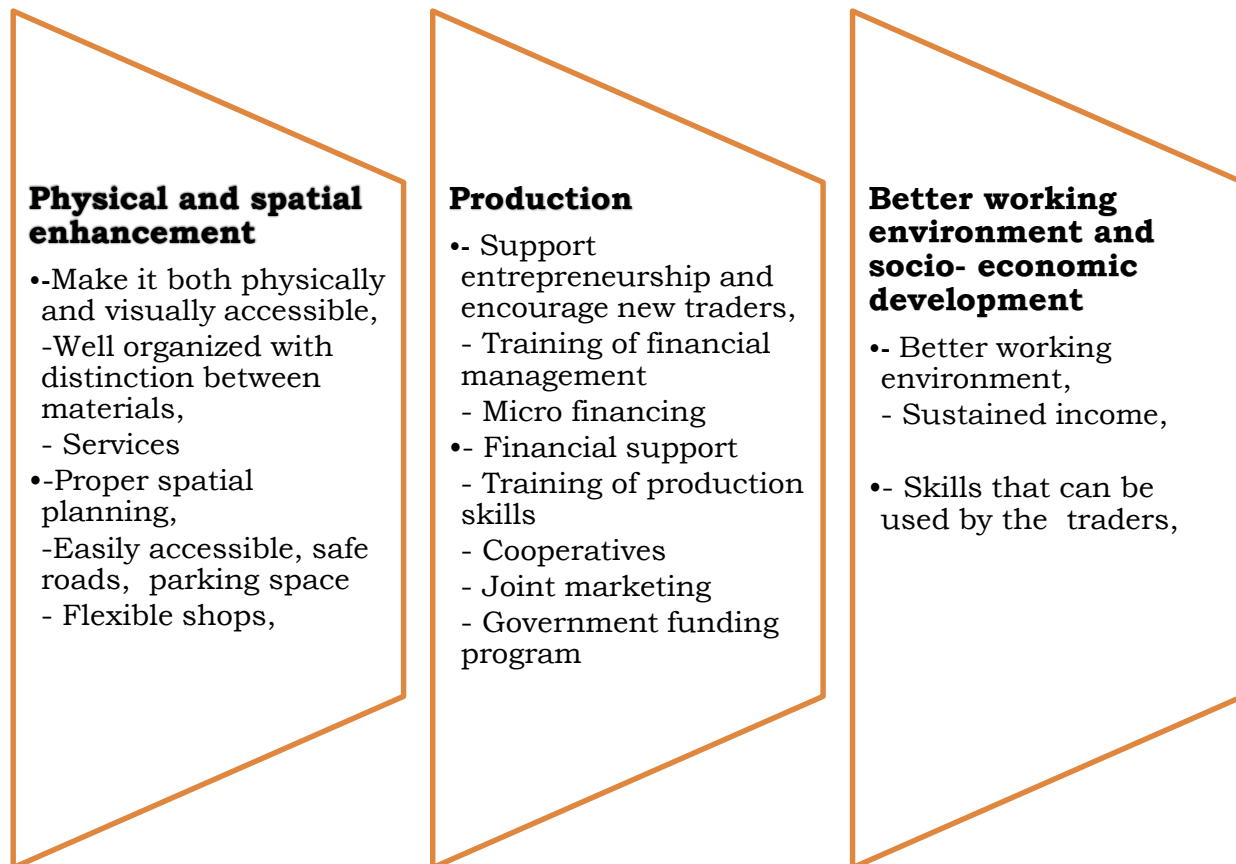


Figure 4.3: Detail concept development

4.2 Tools

4.2.1 Maximizing the frontage of accessible shops: The more we move, the more we see, the more we buy,

Movement is a common activity in market areas and it is through movement that much of the shopping is done. Through movement, a large distance is covered which mostly means more shopping is done.

Movement can be expressed through dynamic connections. The more dynamic the connections made between two locations, are the more movement there is. The dynamic connections that are made in the market increase the distance travelled with coverage of more shops, shopping and activities in the market. Active and accessible shop frontages will also create a feeling of shorter distance travelled.

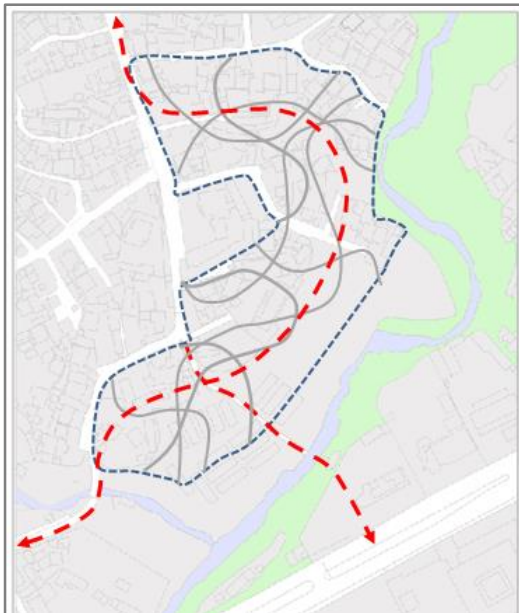
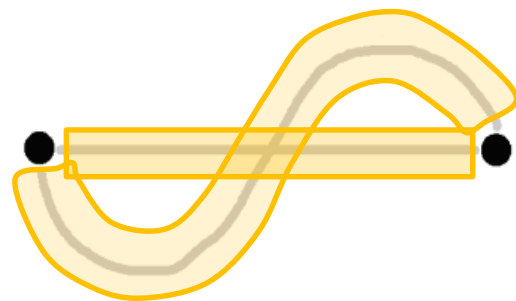


Figure 4.4: Curved lines to maximize shop frontage



4.2.2. Incorporate moving traders and surrounding markets,

The traders from surrounding areas of Addis Ababa have played a big part in the development of the market and should be allowed to stay in the market. Bringing back these traders from surrounding parts of Addis Ababa will maintain the history of the market. It will also make it more vibrant by changing the scene.

Informal traders from the surrounding areas of Agoza will also be incorporated in the market by creating a better condition for them to work in Agoza.

4.2.3. Enhance physical and visual permeability

Physical and visual permeability will attract the traders to the market. Ease of physical access will enable the traders and the customers to access the market easily without confusions. Enhancing on the existing paths and providing alternative paths to the market will create this ease of access.

The ease of visual permeability of the market from its surrounding areas will make the market secure and safe to access. This can be done by enhancing the existing view points from which there is a clear view of the market and providing other view point from which there is a clear visual permeability.

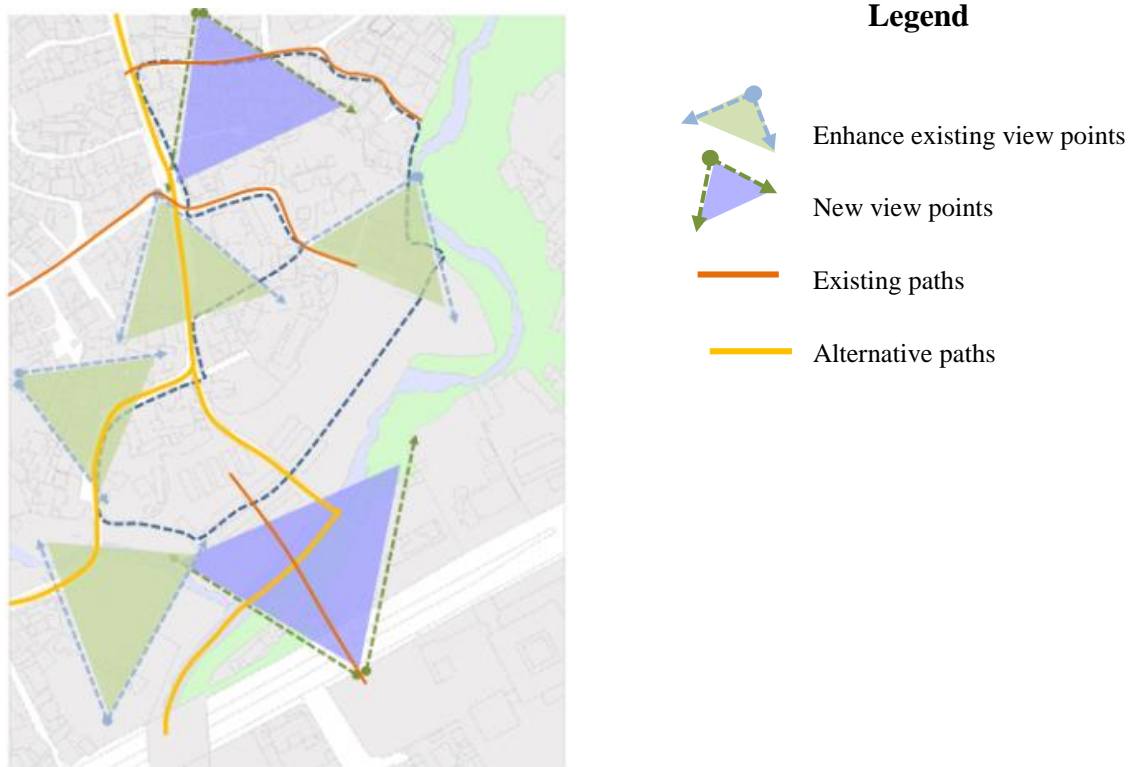


Figure 4.5: Enhance visual and physical permeability

4.2.4. Functional zoning

Functional zoning makes shopping easier allowing the customers to clearly know where to find variety of goods. It will create a good flow in the market by giving a clear spatial organization and definition of space. The functional distinction is done according to the materials sold in each market.



Figure 4.6: Functional Zoning

4.2.5. Create a network of social spaces

A great part of the traders' life is occupied with social activities. Therefore, social spaces provided will mainly function as a space where the traders can discuss issues, work together and have a space for their children to play in. It could also serve as a space for the customers to rest and for the children of the customers to play.



Figure 4.7: Network of social spaces

4.2.6. Easily accessible, safe roads

The access that takes from the surrounding area to the market will be used for both pedestrians and vehicles. They are designed to be connected to parking, loading and unloading areas. These roads will have also shops on each side making it active and secured. The organic road network allows so many access points that can take the customers to more shops, by increasing the frontage and all the shops are visually accessible from the access roads.

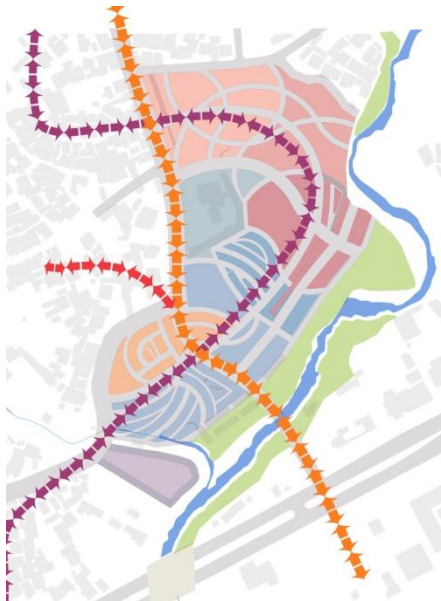


Figure 4.8: Easily accessible and safe roads

4.2.7. Flexible shops

These flexible shops will be used for two purposes in the market. The first purpose is for the mobile traders who are expected to come from the nearby and the surrounding areas of Addis Ababa. These traders will have a stable and comfortable place of work. The second purpose will be for new traders who have a desire to join the market. These traders will be able to start their business with a small amount of initial investment and can improve their shops as their incomes tend to grow.

These flexible shops are intended to be secured easily carried or moved for the reason of having a light weight, sufficient storage and display spaces. These shops can be modified according to their need and preference since they are designed to be effectively adoptable.

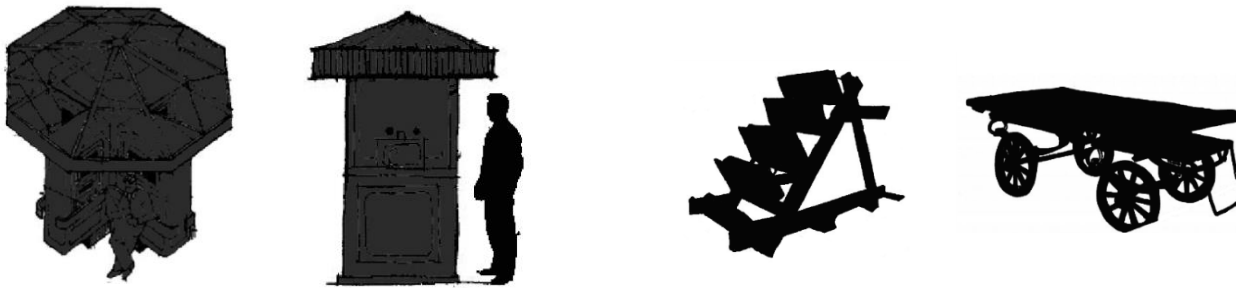


Figure 4.9: Flexible shops

4.3 Design Program

The design program is developed in integrating the existing conditions of the market with its functional development. All the existing functions that are found in the market have been considered and integrated with the design program development.

4.3.1 Break down of functional development

1. Urban agriculture and buffer
 - Fruits and vegetables
2. Vegetable and fruit market

- Shaded shops for fruits and vegetables
3. Festival sites (temporary)
- Flexible shops
 - Includes various types of materials
4. Workshops and materials
- Metal, wood, bamboo, clay, charcoal, *Kubet*, made and sold
 - household materials
5. Food stuff
- Legumes and different herbs,
6. Beauty corner
- Cloths
 - Hair saloon
 - Tailors
 - Traditional cloths (*Shamane*)
 - Jewelry and beauty shops
7. Animals dairy and products
- Poultry and animal market with processing connected to surrounding MSEs,
 - Small scale production area
8. Common functions
- Services (Stores, toilets, Garbage collection points)
 - Fast food corners (customized according to the *Tera*: fruit area will have foods made of fruit.)
 - Restaurants
 - Play grounds
 - Social spaces
 - Parking

4.4 Functional Distinction

Totally, the market will have about 6 markets within it together with a space for urban agriculture. Each market will have a distinct product to sell along with its own production space. This will be easier for customers while shopping since they can easily identify the kind of product that they need to buy. It will also include social spaces and children's playground. The total area of the market 32,262 m² and is designed to accommodate about 618 traders, 218 shops, 6 workshops and 4 outdoor markets.



Figure 4.10: Functional Distinction

4.5 Types of shops

4.5.1 Type I

Though this type shop has its own display area, the space is designed to be used as storage simultaneously. It is small in area and can be used in the festival sites.

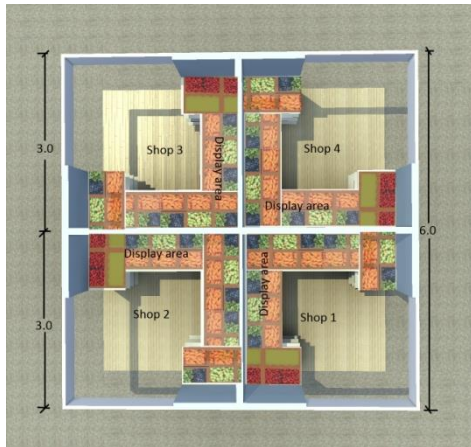


Figure 4.11: Type I shop

4.5.2 Type II

This type of shop has a display area together with central circulation and storage spaces. Each shop accommodates four people. The shop is wide enough for displaying products depending on the function and type.

In order to ensure the efficient use of the space while displaying, the doors are opened and closed with shutters. It has also hangers to display products that can be hanged.

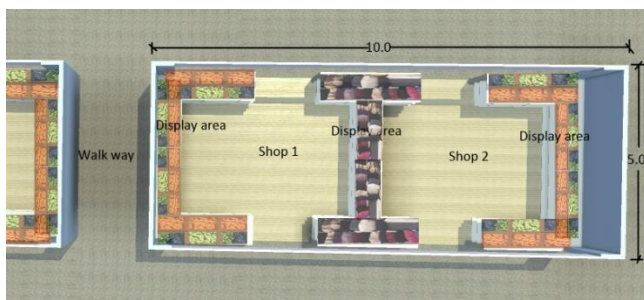


Figure 4.12: Type II shop

4.5.3 Type III

This type has a working space and display area. The working space can be used as a production area where materials can be produced.

Each shop can accommodate four people each having their own respective working and display area. Like the second type, this kind of shop is also provided with hangers and shattered doors.

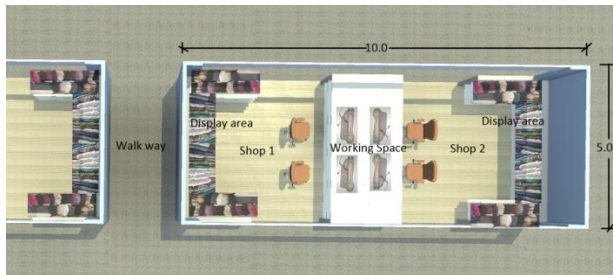


Figure 4.13: Type III shop

4.6 Bamboo Construction Methods for shops

Footing: bamboo can be incorporated with concrete to directly use it for the construction of a concrete footing. This can be constructed in the form of a single post footing, where the bamboo is imbedded in the footing. For this process, the largest and stiffest section of bamboo should be used.

Source: Bamboo as a building material for meeting East Africa's housing needs, 2011

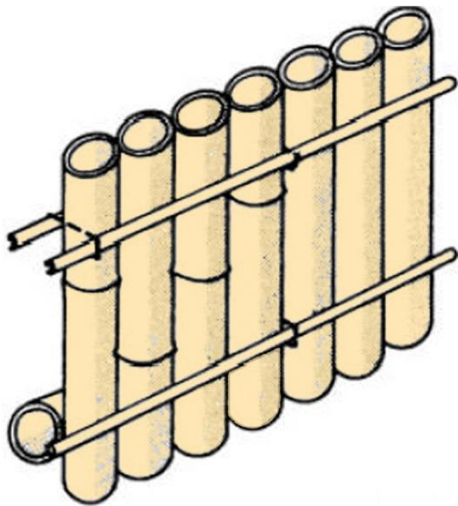


Figure 4.14: Wall of whole bamboo culms

Walls: for the construction of walls, vertical orientation is preferred as it increased the shear resistance. Vertical member are driven directly to the ground or fixed back to beams. Woven bamboo mats can be tied together on one or both sides.

Doors: sliding doors can easily be constructed for the shops using bamboo. The sliding doors can provide a larger opening and suitable access for the shops. The doors will be constructed with bamboo frame and an infill of woven bamboo with smaller diameter culms. These larger doors will ease visual permeability and physical access to the shops, allows ventilation and natural light and can easily be locked when closed.

Source: Bamboo as a building material for meeting East Africa's housing needs, 2011

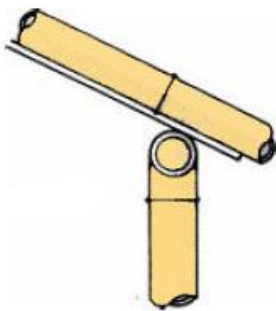


Figure 4.15: Preferred ceiling sarking detail

Roofs and truss: The roof of the shops can be constructed from bamboo, as well. For the construction of the roof, halved culms are as a arranged convex side up on one side and as a layer of convex side up on the other side. A maximum of 3m will be left in between each truss. To increase the span, a King Post truss of 4m can be used.

Source: Bamboo as a building material for meeting East Africa's housing needs, 2011

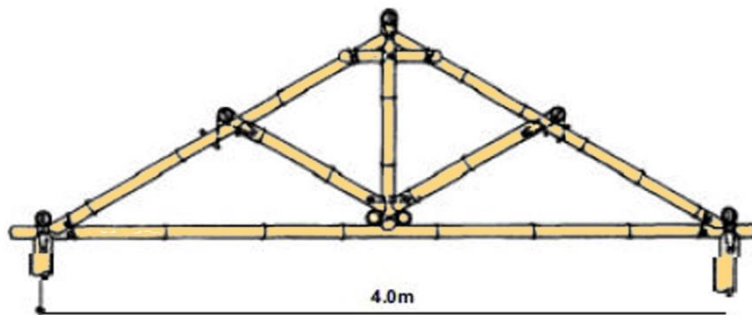


Figure 4.16: King post truss

Source: Bamboo as a building material for meeting East Africa's housing needs, 2011

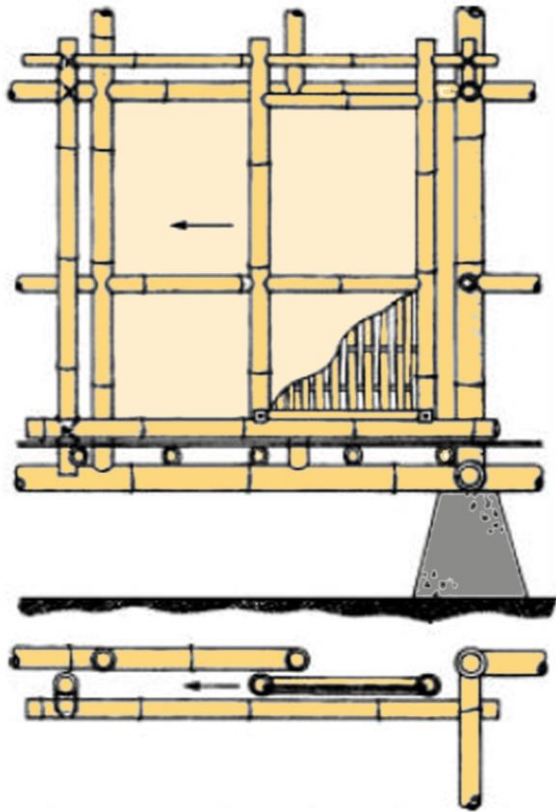


Figure 4.17: Arrangement for sliding posts

4.7 Commodity Zoning

The zoning of the different kinds of markets is done according to the existing functions. Markets with similar commodities are zoned together. Non-trade activities, which are an integral part of the market, are designed as social spaces being considered as part of the network of green spaces.

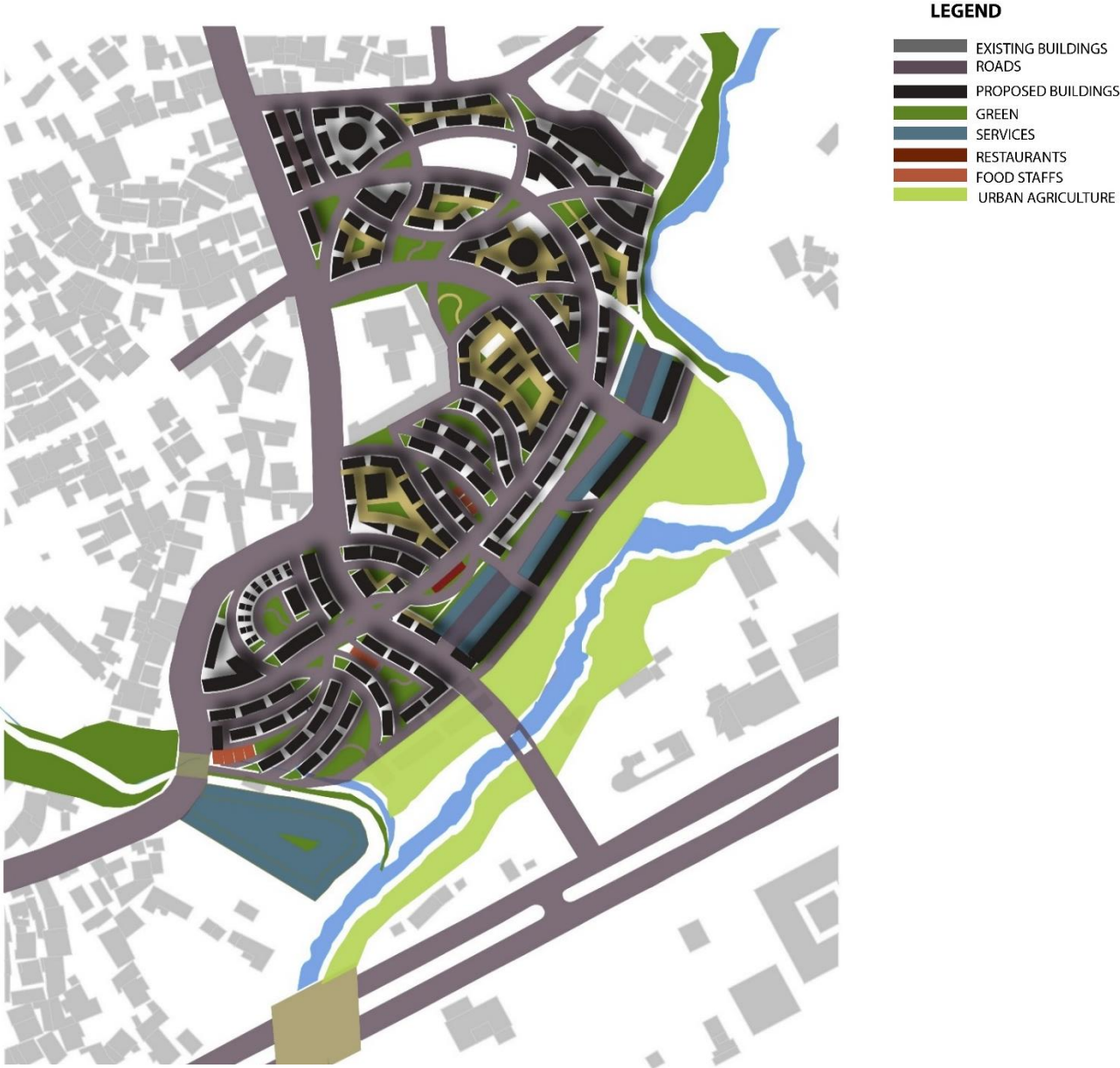


Figure 4.18: Overall Layout

a. Vegetable and fruit market

This market includes fruits and vegetable products that are supplied from the urban agriculture cultivated in the market itself and other distribution areas. It has a total of 41 shops, each of which has 4 stalls and a total of 164 traders.

The waste product collected from this market will be used as an input for the biogas plant. The vegetable and fruit products that are produced in the market are organic since the bio slurry from the biogas plant will be used as fertilizer, instead of chemical fertilizers.



Figure 4.19: View of vegetable and fruit market

b. Festival sites

This market includes various types of products that are supplied by the mobile traders. It is a flexible market place when compared to the others since the traders do not stay there permanently for being provided flexible shops which can easily be moved and can also be used for festivals and exhibitions. It has 98 stationary and 40 movable shops accommodating a total number of 138 traders.

Moving traders from the surrounding areas of Addis Ababa (the Oromo) come to visit this market. The role these traders have played in the development of the market will be recognized and

appreciated by being allowed to be part of the market. The traders can use transportation to and from the market together and can also use alternative roads to access the market, instead of the main roads.

This market is also the space where new comers will first join. For the reason of a smaller initial investment and rental free, new traders can be a member of this market. The traders have an opportunity to be creative since they can setup their own shops according to the type of goods and products they sell by fulfilling their needs.



Figure 4.20: View of festival site

c. Food stuff market

This market is the section where food stuff is sold. It includes legumes and different types of herbs. It has a total number of 16 shops, each having 4 stalls and a total number of 64 traders. It also includes small cooking spaces and a food tasting area. Traditional ointments made from different herbs are also found here. The market is provided with flour mills and the spaces can be used to naturally dry the food, which is a common tradition in the market. Tej and Tela places can be used to promote traditional Ethiopian drinks internationally. These places can pack and sell these drinks without providing places where people can drink.

d. Cloth market

Cloth market is the section where cloths are made, displayed and sold. It has a total number of 21 shops, each being provided with 4 stalls and a working space that is provided for about 84 tailors. They can display both traditional and modern materials and different types of readymade cloths. In order to maintain the existing character, the market place is designed to include beauty shops and hair salons.

This market also includes 3 weaving areas where traditional cloths can be provided by the Shemanes (traditional cloth weavers). This can help the traders to promote the traditional way of making cloths in a modern environment and to show how it is actually made. Therefore, can attract tourists and many others that are not familiar with this method of making cloths. The materials that are made here can be directly sold in this market.



Figure 4.21: View of Cloth market

e. Workshops and materials

This market includes small scale workshops for metal work, wood work, bamboo products being provided an outdoor working spaces for clay, charcoal and Kubet. It also includes display areas where household goods and other products can be sold. It has a total number of about 17 shops,

each having 4 stalls accommodating a total number of 68 traders. This section also has other three outdoor workshops.



Figure 4.22: View of Workshops and materials

f. Animals and products market

This market has two types of shopping spaces namely an open animal market or the *beg tera* and closed shops for products. With a total area 4200m², this market has 25 shops, each provided with 4 stalls and production areas accommodating a total number of about 100 traders and 3 open animal markets with an area of 3200m². The products include food stuff and animal products such as milk, meat, cheese, honey and the likes.



Figure 4.23: Animals and products market

Source: Design proposal

Type of shops	Number of shops	Number of traders	Open market
Organic vegetables	41	164	
Food stuffs	16	64	
Festival sites	40	138	
Workshops	17	68	
Animal products	15		3
Cloths corner	21	84	3

Table 4.1: Types and number of shops

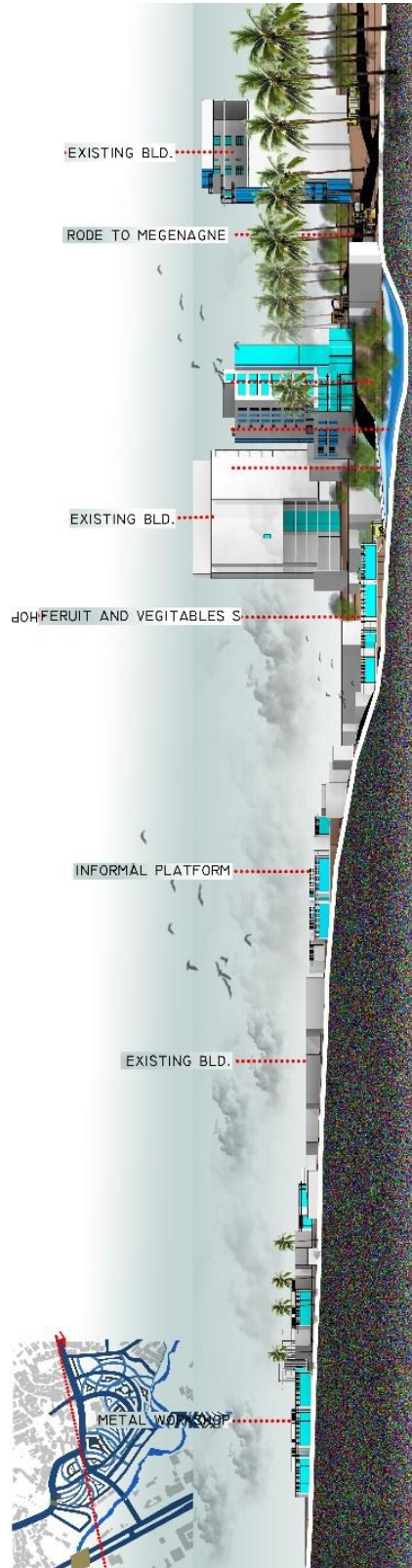


Figure 4.24: Site section 1

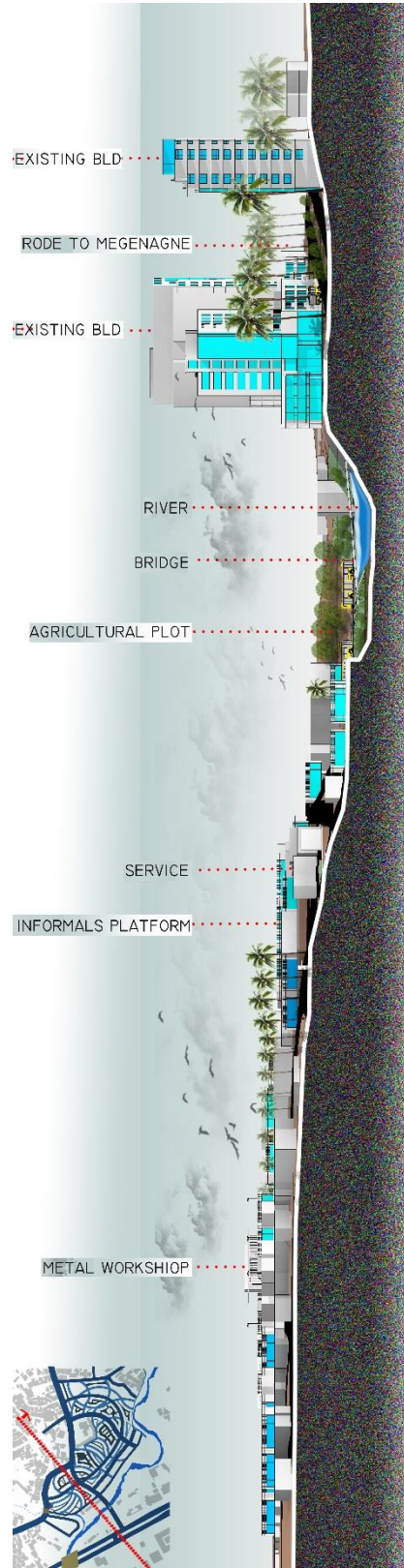


Figure 4.25: Site section 2

Waste product from this market will be used as an input for the biogas plant. This organic waste, which would have otherwise polluted the environment, is assumed to be a huge resource for the biogas plant.



Figure 4.26: Ariel view



Figure 4.27: Overall 3D view

4. 8 Road network, Green network, Urban Grain, Services

4.8.1 Road network

The road is designed organically so that the network is organic to connect many points, maximize the frontage of the shops and their quantity. The roads taking to the market are accessible for both vehicles and pedestrians and can easily lead to the parking lots. The roads provided throughout the market are all pedestrian walkways.

Loading and unloading activities are possible to be performed at the roads which can be accessed with vehicles. Each market is connected to these roads and from these roads materials supplied in to and out of the market can be transported by using carts. All roads both pedestrian and vehicular are made of coble stone.



Figure 4.28: Proposed road network

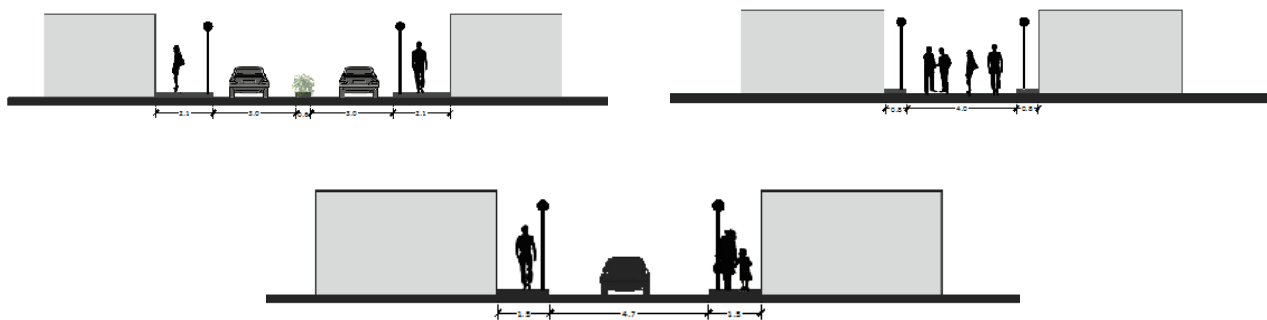


Figure 4.29: Proposed road section

4.8.2 Green network

The largest part of the green space is occupied with the green buffer and the urban agriculture. The network of green space in the market is designed for the social space and children's playground. The social space is used as a gathering space for the traders where they can meet, sit, talk, and work together.



Figure 4.30: Proposed green network



Figure 4.31: Softscape VS hardscape

It is also used as a resting space for the customers after shopping. The children area functions as a space where the children of the traders or the customers can wait for them while playing. The

green area covers 3296 m² i.e. 10.2% of the total market area. Both the green buffer and the urban agriculture covers a total area of about 9546.4 m².

4.8.3 Urban grain

The built up structure is designed to follow the organic road network so as to show the continuous layout of the shops that are designed aligning the road. Much of the space that is found aligning the streets is occupied by shops and the central parts of the plots are serving as a working place or open spaces. The built up area covers a total of 11,759.5 m² i.e. about 36.4% of the total market area. This includes both the covered market and its working areas.

The grain size is fine and similar for all the markets being provided with similar size of shops. The built up structures have a maximum height of 3 meters. This makes all the shops to be visualized in human scale.



Figure 4.32: Urban Grain

4.8.4 Services

The services include toilets that are located at the back side of the market i.e. at the parking lots and storage area. Cold stores are also provided for the fruit and vegetable markets and the animal and dairy products market. Each market is provided with its own toilet including toilets for the disabled. And toilets that have showers are provided by the parking lots. The storage mainly functions as raw material storage for the products that cannot be stored inside the shop itself.

The parking lots and other services are designed to be connected to the main road. Garbage collection points of the non-organic wastes that are allocated at the corners of each plot. The organic wastes are disposed and guided to the biogas plant. The recyclable materials are isolated and recycled, while the rest can be collected from this point and disposed. An office for the traders' union where timely meeting can take place are provided along with a multipurpose hall where different activities like trainings, meetings, religious and social activities can take place. Security check points are also provided for each market.

Though playgrounds are provided for kids, for children that are younger and require full time attention, a daycare is provided. This will allow the mothers in the markets to be fully engaged in their work while keeping a close eye on their children. Along with this a mini clinic or a first aid station is provided for emergencies because the market accommodates a large number of people and various activities take place.



Figure 4.33: Services

4.9 Urban Agriculture

The urban agriculture found in Agoza Gebeya will be located along the river side Kebena. It will be part of the buffer zone in between the river and the market and the surrounding area. The urban

agriculture alone will cover an area of 7144m². The green buffer included, the total green coverage along the river will be 9546m².

The types of fruits that will be planted include citrus, mango, papaya, avocado, pineapple, passion fruit, apples and strawberries, while the vegetables include potatoes, cabbage, eggplant, tomato, celery, cucumber etc.

The waste product from the vegetable and fruit products will be used as the main source of input for the Biogas production. Fertilizers will also be produced from the bio slurry of the biogas plant.

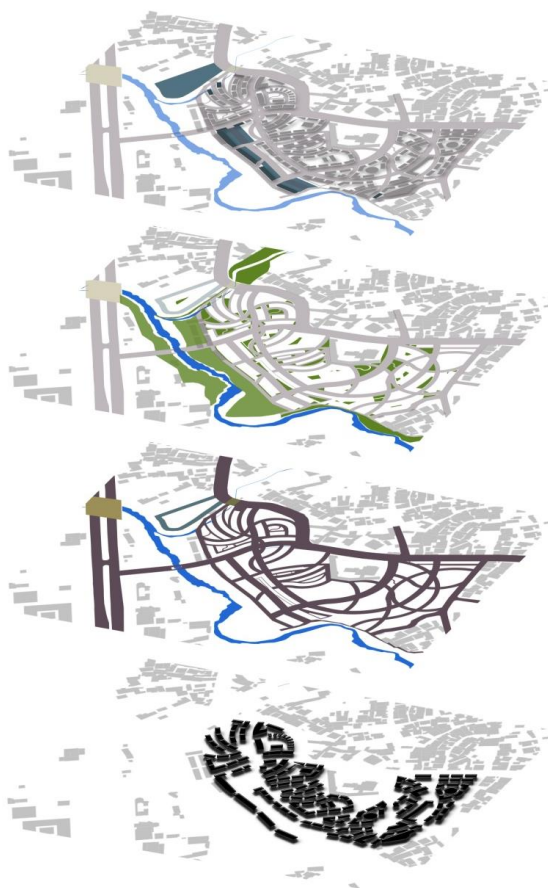


Figure 4.34: Layers of Green, services, road network, morphology



Figure 4.35: Proposed urban agriculture

4.10 Biogas Production

Biogas is mainly composed of 50 to 70% methane (CH₄), 30 to 40% carbon dioxide (CO₂) and small amounts of other gases. (National biogas program Ethiopia, 2008) It is an attractive option to replace unsustainable use of electricity especially in areas where organic waste can be found.

In this market, the organic waste which will mainly be composed of the leftovers from the fruit and vegetable market and the animal waste from the animal market, will be used as a raw material resource for the production of energy while producing biogas. The organic waste from the fruit and vegetable market and the animal waste from the animal market would have otherwise polluted the environment. Disposing this waste would have also been difficult. The energy gained from the production of biogas can be used to run the food production areas that are found in the market. These can be cafes, restaurants and food tasting areas.

Biogas production has also the potential to reduce the chemical fertilizer expenditures that would have been invested for the urban agriculture. It also makes the product in the market to be more organic. Since the market covers a large area, the energy from the biogas will only serve the animal market and the fruit and vegetable market.

The main requirements for the production of biogas are waste products which can be supplied from both markets, water from the river. Attaching the toilet to the plant is advisable as it improves sanitation condition but also because the urine improves the fertilizer value of the slurry which enhances the benefits of the biogas plant.

The organic waste is guided from the waste collection areas to the biogas plant through covered pipes which directly go to the biogas plant that is installed at the edge of the market.

It is estimated that 1 cattle can produce 10kg of dung per day. A 10m³ plant requires a 100kg of dung (20 cattle per day) and a 100lts water (urine) which can produce 4000lts of gas which can power 10 hours of stove. (National biogas program Ethiopia, 2008)

As per the above calculations in order to provide stove for the 25 shops of the animal market for 8 hours a day

200hrs (8hrs* 25 shops)=80,000lts of gas

80,000lts gas= 2000lts water +2000 kg of waste in a 200m³ biogas plant.

This goes to show that a 200m³ biogas plant is required to serve the market. The 2000kg of waste can be collected from 200 cattle per day. These cattle are part of the open animal market and are provided with space. The plant is strategically located at a close distance to the animal market where much of the organic waste is likely to be produced. It is also located close to the river and toilets which will be the source of water.

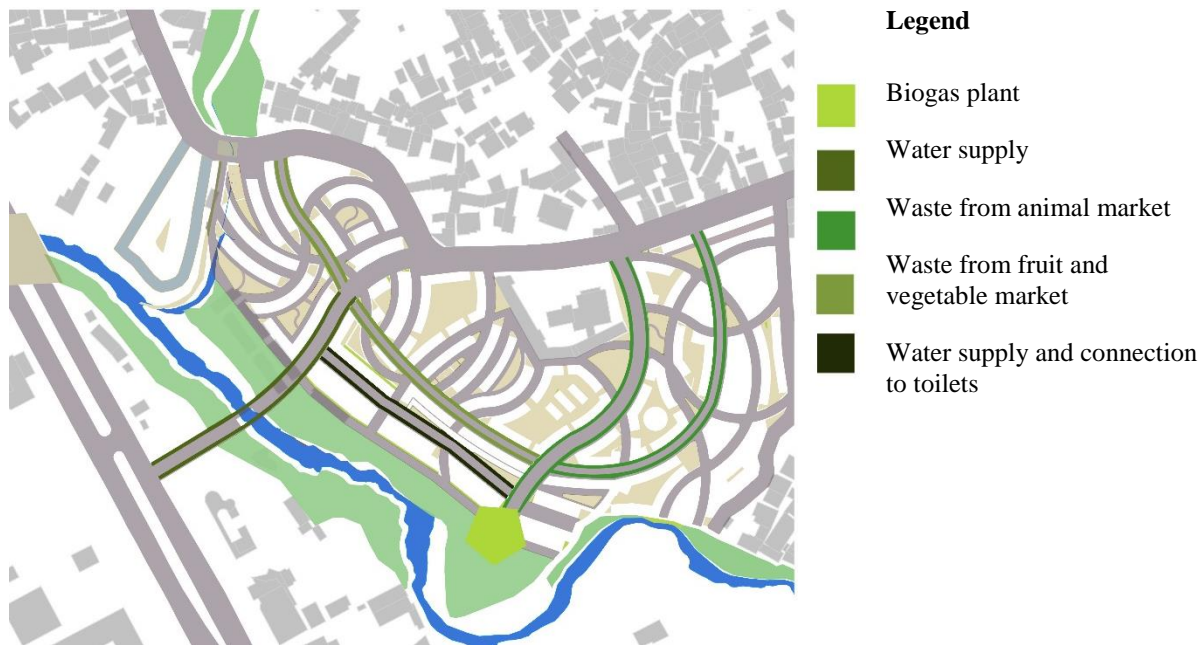


Figure 4.36: Location map of biogas plant on site and waste collection pipes

The waste collection pipes are the main connection that feed the biogas digester. Organic waste from the markets are collected in the pipes and will flow to digester along with water that is comes from the river as well as the urines from the toilets which can reduce the retention time.

The type of biogas plant is called *Sinidu* (National biogas program Ethiopia, 2008). It is a low cost biogas digester which can be made of locally available stones and materials.

Source: Adopted from (National biogas program Ethiopia, 2008)

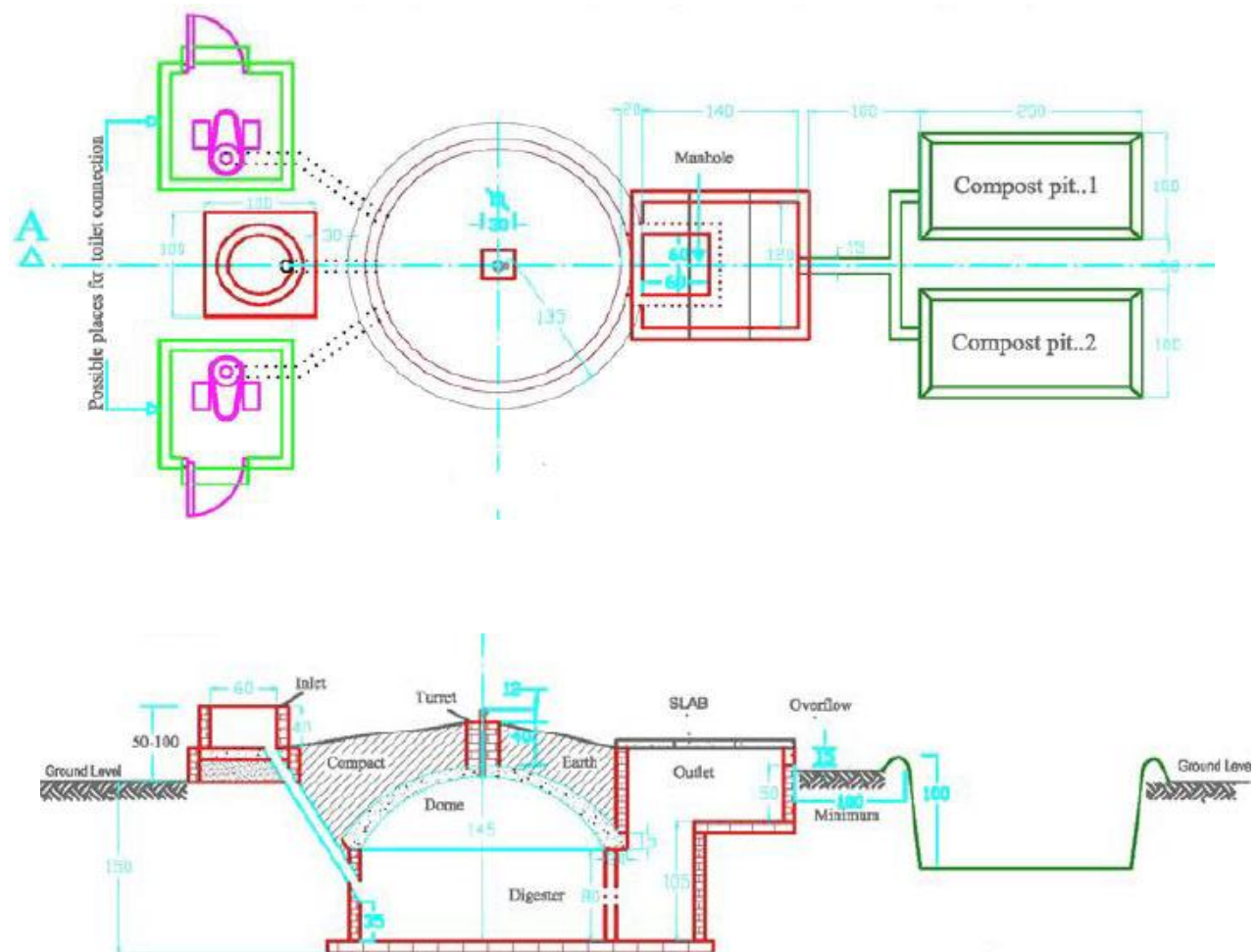
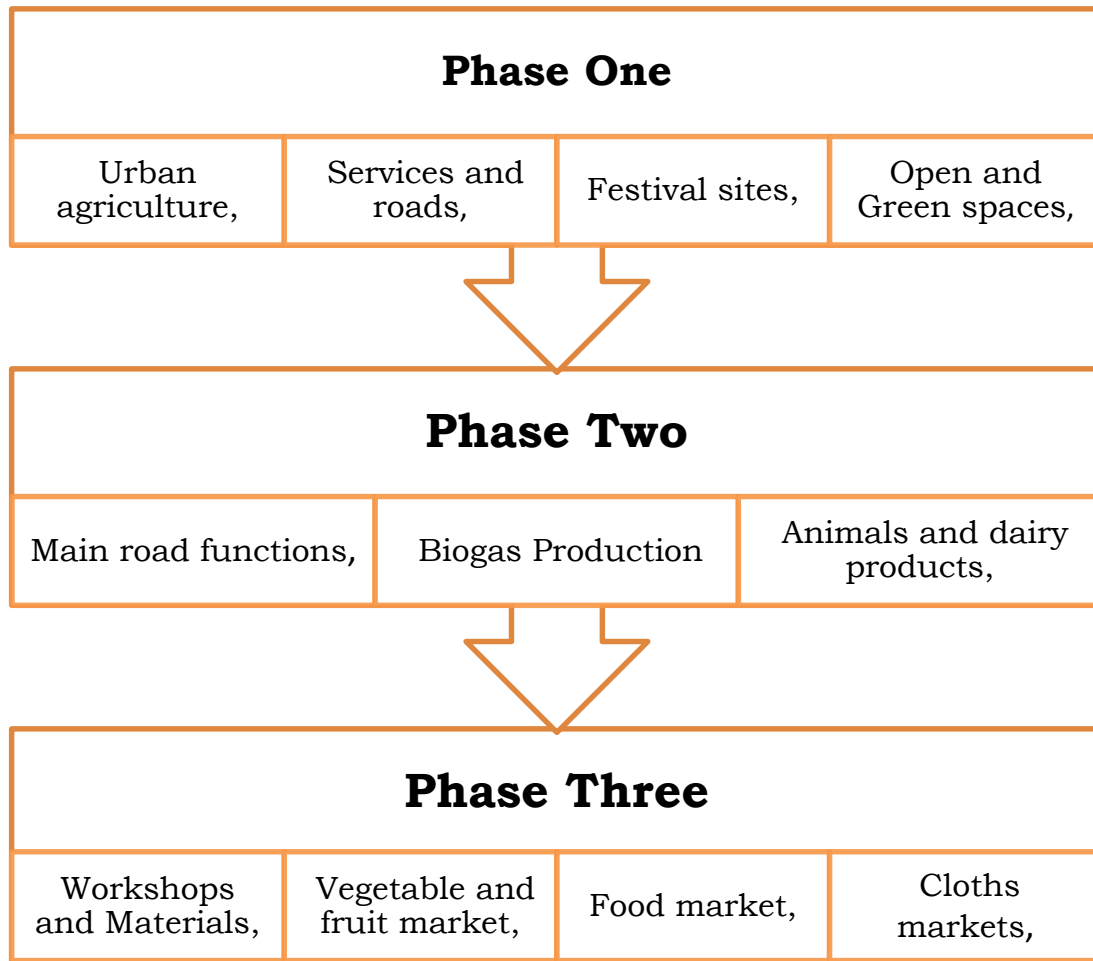


Figure 4.37: Biogas plant

4.11 Implimentation Strategy

The phasing for the development of the market mainly depends on two factors. The first factor is the time frame that will be required for the development of each service. This implies that the services that require more time for development will be prioritized where as those that require little time, are easy to develop and require less investment will also be prioritized. These will be prioritized since they can serve as a resource for the development of other services.

The second factor is the revenue that can be earned from the development of the service. The service that can bring more revenue will be developed first since it can be used as a resource for the development of the other services.



4.11.1 Phasing

a. First Phase

The first phase of development of the market will start with the urban agriculture. The festival sites and animals market will be developed. The development of these markets will keep the market functioning and serve as an income generating until the time when the market starts functioning as a full-fledged market.

Urban agriculture:

The urban agriculture on site will basically include fruits and vegetables that can easily grow within the climate of Addis Ababa. In this phase of development, the site will be made ready for cultivation and the vegetables and fruits will be able to be planted.

Festival sites:

This market is the most flexible market when compared to the others. It can be used for festivals and bazaars, which will help the market to maintain its activity while the other parts of the market are being developed. Since this market is provided with the simplest type of shops, it will be found easier to develop.

Animals and products:

This is also another market that is found to be easier for development since much of the market will be open. Until the construction of the shops is finalized, the open animal market cannot face a problem to function.

b. Second Phase

The second phase of the development continues simultaneously with the development of the main road, the services and the open and green spaces. Another important factor for the development of the market, which is the training given to the traders, is also scheduled to start in this phase of the market's development.

Main road functions:

These functions mainly include restaurants, cafes and shops that are found along the main road side. The development of the functions at the main road will play a great role by making the main road active and attractive for customers.

Services and Roads:

The services include storage spaces, parking lots, garbage collection and toilets. These functions influence the proper functioning of the market and should be developed before the development

of the market. The Biogas plant and all the necessary facilities for the well-functioning of the biogas production, will also be constructed in this phase.

The construction of the roads will also be executed at this stage. The building materials of the roads will be cobble stone for all the roads both pedestrian and vehicular.

Open and Green spaces:

These functions will also be part of the second phase of development. The children's playground and social spaces are part of the green coverage of the site and will be established before the development of the market, as a whole.

C. Third phase

The last phase of development will establish the workshops and materials market, vegetable and fruit market, the food market and the cloth corner. All of these markets will be composed of the existing trained traders and new traders too.

Workshops and Materials:

The workshops which are already functioning in the market can be developed in a bigger scale. The trained traders can start their work in the workshops, while at the same time, giving off their products in the shops.

Vegetable and fruit market:

The vegetable and fruit market will be established by using the resources from the urban agriculture. The construction of the shops will be done in parallel with the urban agriculture. This market is made ready on this phase of the development since its products come from the urban agriculture. This market, being a part of the last phase of the development, will allow a sufficient period of time for the urban agriculture to yield products.

Food and Cloth markets:

The development of the food and cloth markets will also be part of the last phase of development. The construction of the shops will determine the amount of time required.

Source: Design proposal

	Types of service	Time frame in 3 months						
		1	2	3	4	5	6	
Phase I	1. Urban agriculture	█						
	2. Site clearing	█						
	3. Animals and products		█					
	4. Festival sites		█					
Phase II	5. Main road functions			█				
	6. Services and roads	█						
	7. Green and open			█				
Phase III	8. Workshops and materials					█		
	9. Vegetable and fruit market	█						
	10. Food and cloths						█	

Table 4.2: Timeline for phasing

4.11.2 Economic and social enhancement

As part of the implementation strategy, and in order to make sure that the spatial design will come to reality and can be sustainable, some economic and social enhancement methods have been proposed. These will be part of the spatial design process and will assure the proper functioning of the market.

a. Ownership and Cooperatives:

The market is under the ownership and administration of Wereda 8's Micro and Small Scale Enterprise, during the time of development. The process of development will be done with the cooperation of the city administration and the Agoza Gebeya traders committee with the understanding that the individual shops will be given to the traders. Traders who have participated in the process of development have to be trained in advance by the city administration.

After the development of the market by the city administration and all the three phases of the project are completed, the ownership and administration of the market will be transferred to the Agoza Gebeya traders committee, which will basically be comprised of the traders in the market. Finally, shops will be transferred to individual trader, each with his/her own legal business license.

b. Joint Marketing and Micro financing:

The main concept used for the proposal is to develop a market that is fully functioning by its own through production so as to make the traders the full beneficiaries. But, there is also an opportunity for joint marketing. The products from the urban agriculture can be distributed to other markets being promoted and sold by other traders. This will open up opportunities for other traders other than traders from the Agoza, to participate and be a part of the market.

Financial service, such as Micro financing can also assist the traders through microfinance institutions, such as credit unions, financial non-governmental organizations and even commercial banks, where these traders can obtain small loans by organizing them in to groups.

c. Training:

The training given will be of two types, the first being technical training and the second business and financial management. The training will be given to all the traders parallel to the construction of the site. The traders will take part in the training and the construction process. This can also serve as a means of income for the traders during the time of construction.

The technical training given will include metal work, wood work, bamboo, pottery, weaving, the art of basket making, embroidery, agriculture and efficient ways to work with, charcoal and *Kubet*. According to the market in which the traders will work in, they are given the training and will develop skills. These skills will be a source of income for the traders in this market or where ever they go.

Business management skills will enable them to run their business, establish goals and achieve their goals. Financial training will enable them to efficiently use their finances and resources, such as using loans efficiently.

The market will be under the ownership and administration of the Agoza Gebeya traders Committee. The responsibility of enforcing proper taxation that is fair for the traders will be under this committee. The traders will each have shops with their own legal business license.

For the Agoza Gebeya, the chosen type of tax assessment is the occupational and sector-specific standards assessment. This is a fixed lump sum tax assessment to be paid by the traders that are engaged in the market and that business. This is a type of tax assessment that is practiced for different businesses in Ethiopia. (Africa tax spot light,2013) It is assessed according to the average income of the traders in the market. This method can be ideal since it is difficult to access the exact income of the traders. This method does not give the exact average, but the occupational grouping and does not consider inflation or changing economic conditions. Hence, should be subjected to revision on a certain time frame.

The traders need to, also, see where their tax money is put by creating better working environment and business incentives. Another method can be to train them on the uses and advantages of tax.

4.12 Recommendation

The following recommendation is forwarded based on the assessment done on the case study area and the design made based on the assessment. The results from physical, social and economic assessments done have resulted in the following recommendations. Economic and social recommendations have also been made as if they are able to support the spatial design and therefore, without these recommendations the spatial design alone cannot be expected to be practical. These recommendations serve are forwarded to serve as an urban design guideline for open markets and can also be adopted by various markets that are seen to be underdeveloped around the city.

4.12.1 Physical enhancement

- Visually and physically accessible market creates ease of use, comfort and safety for both the traders and the users.
- Functional distinction in the market is required to avoid confusion for the users also creating a better environment for the traders to work in.
- Spatial planning that considers proper use of interior and outdoor spaces, infrastructure and services
- The market should easily be accessible by both vehicles and pedestrians through easily accessible safe roads.
- Planning should consider the existing network of traders and the culture in the market.
- Allow the traders to be creative by allowing them to design their own shops and allowing them to be part of the design of the whole market.
- Develop mechanisms to mitigate pollution, flood, contamination, using technology and proper allocation of spaces while planning.

4.12.2 Social enhancement

- Support the social interaction through the formation of cooperatives, groups and by creating social spaces that can increase these activities.
- Create spaces where the producers can be the direct beneficiaries of the revenues and the resources in the market.
- Spatially formalize the market through ways the traders can be involved and they can also feel a sense of ownership and belongingness.
- Develop the existing social network like Ekub or cooperatives, and design spaces for it so it can be used as both a social and economic support system.
- Develop ways that prevents unwanted and unrespected businesses that disturb the community and find ways to change these businesses in to a socially acceptable business ideas.
- Develop mechanisms that ensure the safety and security of the market through planning and proper provision of security guards.

4.12.3 Economic enhancement

- Technical, financial and business training should be given to the traders that they can use these skills to have a more lucrative business and also other skills.
- Financial support from government through cooperatives and other social networks created by the traders.
- Tax levels should consider the level of income of the traders greatly and traders should be allowed to get shops that are tax free or have a grace period.
- Support entrepreneurship and encourage new traders by allowing new traders to join through minimum investment and small amount of rent or free.

