

SES

Social Inclusion and Energy Management
for Informal Urban Settlements

CASE STUDY EXPLORING THE USE OF DOMESTIC SPACES FOR HOME- BASED INCOME GENERATION

Alemea Girmay



Funded by the
Erasmus+ Programme
of the European Union



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ABSTRACT

Addis Ababa, the capital city of Ethiopia, a bustling metropolis is a small-scale fabric of global main-streams, 80% of its inhabitants living in slums, 51% working in the informal sector. Among the informal sector activities, home-based enterprises (HBEs) are very crucial in Addis Ababa, where 70% of people running businesses report the same. Yet, there is a paucity of studies on this activity. Hence, this study was motivated to explore the use of domestic spaces for home-based work, in areas where the population density is high. Thus, self-employed women in Addis-Ketema are used as a case-study.

Methods employed in data collection include self-administered questionnaires, in-depth interviews with households and key-informants, field observation, photo registration, measurement and drawing of domestic spaces. Drawing on this data, the paper examines implication of using domestic spaces for home-based work.

The findings reveal that home-based work is not spatially confined to the dwelling and scarcity of space does not prevent from accommodating the HBE in the domestic space. Home-based workers use domestic spaces starting from the dwelling, to the courtyard and neighborhood street. Besides, operators use different techniques to configure these spaces, starting from simple (cleaning and changing of function of space) to comprehensive (adjusting partitions, extension and enclosure of veranda, replacing the structure step-by-step, constructing rooms & building temporary movable structures).

Furthermore, the study explores the perception of the households towards accommodating HBEs

in the domestic spaces. And, the study found out that the benefits of accommodating these HBE at the domestic space are: closeness to customers & service (time and money saving), symbiosis in the phenomenon and optimal use of the house, household participation and family supervision, and enhancement of security. However, the challenges are nuisance related (noise, smell, dust and smoke), risks related (Such as health, privacy, and security), and crowding.

Despite the fact that HBEs are the primary income source to support the households, the study reveals that respondents have different perceptions regarding the use of domestic space for home-based work. The integration of HBE activities into the domestic setting is appreciated: when dwellers have small household number, ample room area or where the activity intensively takes place outside the dwelling (such as, courtyard and adjacent neighborhood streets). Furthermore, households support the integration of the HBE activity when there is no movement of the working equipment. Surprisingly, households with scarce space and having a large number of family members, still have positive perceptions due to its being their indispensable income source, enabling them to cover their daily expenses. Nevertheless, respondents have a negative perception towards integration of the home-based income generation activity in the domestic space, where the activity creates health related risk (dust & smoke) and crowdedness.

Based on the findings, the study concludes that accommodation of HBEs in domestic space is an important way through which low-income house-

holds can earn and boost their living and living space. Hence, it attempts to discuss configuration and meaning of domestic space for this purpose. ♦

Keywords: Home-based income generation; domestic space configuration, women in self-employment (WiSE)*, Addis-Ketema, Addis Ababa

“If there is one lesson for planners in the massive literature on slums and squatter community life, it is the finding that housing in these areas is not for home life alone. A house is a production place, market place, entertainment centre, financial institution and a retreat. A low-income community is the same, only more so. Both the home and the community derive their vitality from this multiplicity of uses. The imposition of artificial restrictions on both would only hinder their growth and development.”

Laquian (1983, pp. 85)

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ABBREVIATIONS, ACRONYMS AND LOCAL TERMS

CSA – Central Statistical Agency

HBE – Home Based Enterprise

HBIG – Home-Based Income Generation

HH – Households

IGA – Income Generating Activities

IHDP – Integrated Housing Development Programme

ILO – International Labour Organization

SACCOs – Saving And Credit Cooperatives

WISE – Women In Self-Employment

Local terms

- Baltina – a traditional profession of spice and cultural food preparation
- Duwur – a traditional process of making cottons for clothes
- Injera – Ethiopian flat bread made of “teff”
- Kebele – Local government, the smallest administrative unit
- Sefer (also spelled safer) – Neighborhood
- Shiro / Berbere – Ethiopian traditional cooking powder / Spices
- Tela (also spelled t’alla,t’ella) – ethiopian traditional home brew beer
- Woreda – third level administrative division of ethiopia it is also known as district

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PART 1 INTRODUCTION

1.1 Background

In keeping with the pattern of urban growth of the least urbanized countries, Ethiopia is currently witnessing one of the fastest rates of urban growth in the world, with an average 10.9 per cent per annum over the past ten years (UNDP, 2014). Owing to its indigenous settlement, Addis Ababa, the capital city of Ethiopia, is haphazardly developed with sub-standard housings and poorly serviced neighbourhoods particularly in the inner city (UN-Habitat, 2007). Today Addis Ababa, with the vision to take a role as a global player looks like a huge construction site in a constant motion due to the inner-city redevelopment and IHDP.

Its intractable housing challenge and teeming population growth creating the need for rapid urbanization, have led to a high concentration of public housing schemes. However, UN-Habitat (2010) reports that the issues of *socio-spatial adaptation* and *affordability* in these pro-poor housing schemes remain pressing and most likely to be more pronounced in the low-income households.

The use of housing as both a home and a source of income have become common in the *informal urban areas*, as a strategy to improve living conditions (Kellett, 2003, Nguluma, 2003; Sinai, 1998). For many low-income households, their dwelling is one of the few resources that they have for generating income and they do this either through passive activities such as renting out rooms or more active: home based enterprises (Tipple, 2000). Owners of HBEs have been able to consolidate their dwellings through the income from these micro-enterprises

and many households would not have been able to afford their dwellings without the HBEs (Tipple, 2000). One of the major arguments against HBEs is their likely effect on domestic space; they use scarce space that is needed for domestic functions (Tipple, 2000).

In recent times, research on the different aspects of home-based income generation is on the increase globally and in developing countries (see Ghafur, 2001; 2002; Kachenje, 2005; Kellett and Tipple, 2000; and Strassman, W.P, 1987), but with a relatively smaller number in Ethiopia, (Tegege, 2010; Johnson & et. al, 2005 and Wondwossen M., 2014). Nevertheless, these have become imperative for a better understanding of HBEs. Though, there are numerous studies examining the phenomena from an economic perspective, but there is a paucity of studies, which look at home-based income generation from a socio spatial perspective of housing.

In Ethiopia, the existing studies e.g. Tegege (2010), mainly, highlight its importance for residents and factors influencing this, while others e.g. Johnson & et.al, (2005) examine individual skills, meaning of housing and role of women households (HH) in income generating. Wondwossen M., (2014), examines income generation and job creation in public housing. From these studies, it has been evident that home-based work in the country is imperative to eke out a living and access shelter, and that this is more pronounced in the women-headed poor urban households.

The existing local and international studies help to provide insight into the general phenomenon of

HBEs. However, the differences among countries in terms of household composition, cultural values and norms, housing design standards, housing quality and needs as well as home ownership structure affects the nature and extent of space use of HBEs, the spatial configuration, and potentials and conflicts pertaining to this and will most likely differ from one country to another. Therefore, this paper seeks to research the implication of using domestic spaces for income generations in Addis-Ketema, Addis Ababa, Ethiopia.

1.2 Problem statement

According to Strassmann, (1987) and Ezeadichie, (2012) HBEs introduce commercial and industrial uses into areas zoned as residential, extensive use of temporary structures (Okeke, 2000) and the need for additional income through informal business ventures is the driving force behind dwelling alterations (ILO/UNCHS, 1995).

Tegegne (2010) suggested that Home based enterprises are an indispensable income source for the urban poor households in Addis Ababa, since 70% of the people are engaged in such activity. Although, HBE is crucial for the urban poor households, studies have shown that accommodating this in the domestic space causes side-effects.

Unfortunately, in view of the socio-spatial implications of home-based income generation, there is a paucity of studies focusing on this subject in the Ethiopian context. Therefore, this paper attempts to explore the implication of using domestic spaces

for income generation. Thus, this study intends to understand the spatial configuration techniques and the perception of HBE operators in terms of its benefits and challenges. Accordingly, self-employed women home-based workers living in a densely populated inner city (i.e. Addis-Ketema in Addis Ababa) were selected as cases.

1.3 Research Questions

1.3.1 General Question

“How is the domestic space used for HBE & what are the emerging issues of using home (domestic space) as a work place (income generating space)?”

1.3.2 Specific Questions

1. How do HBE operator households *perceive* the functioning of dwellings as both home and working places?
2. What do the HBE operator households do to make their domestic spaces generate income for them?
3. How is the domestic space configured and used for home-based income generation?
4. What are the potential and challenges of overlapping domestic space and workspace?

1.4 Significance of the study

According to Kellett and Tipple (2000), the existence and growth of HBEs is a phenomenon that is directly related to the current economic situation of the world, hence it is unlikely for it to perish in the near future. Therefore, studying on how it operates, along

with the associated issues, contributes to the body of knowledge for the benefit of not only the HBEs owners but also the communities living in informal areas with similar characteristics to the study.

Therefore, this study is an endeavour to fill the knowledge gap towards the role of domestic space in home-based income generation to the urban poor. Moreover, the research is expected to give an insight on how spaces within and adjacent to the dwelling of HBE operators are configured and used and their implications. The information on the organisation and use of the various spaces also contribute towards conceptualisation of spatial needs in the domestic setting.

This study will also serve as a reference to different stakeholders involved in the housing and urban development to critically consider the spatial implication of home-based income generation on the livelihood of the urban poor. Thus, this will enable to sustain their livelihoods in the current and future pro-poor housing programmes. ♦

PART 2 RESEARCH METHODOLOGY

2.1 Introduction

This chapter deals in detail with the methodology that the researcher employed to conduct the investigation/study. It gives an explanation about how data was collected and analysed for drawing conclusions and recommendations.

2.2 Choice of Methods

The research method used is a case-study research. Such *explanatory* case studies can be complemented by two other types-*exploratory* and *descriptive* case studies.

This research combines qualitative and quantitative methods to find a valid data. Quantitative research quantifies number of relations among the variables (Hopkins 2008). The quantitative method employed in this research is used to measure numbers of rooms, areas of rooms, occupancy rates (persons per room), space per person, areas used for HBE activities, shared spaces (HBE and domestic). Through the qualitative data (picture, maps, sketches, stories, words – through the in-depth interview and documents), this research identifies the cost and benefits of HBE, space appropriation techniques and perception of HBE operators about dual functioning of their home.

2.3 Purpose and sources of data

Purpose of data collection

The purposes of the collected data were to understand the key issues of the study highlighted below.

- **Characteristics of the HBE and the dwellers** - The background of the respondents and the home-based income generation they undertake
- **Perception towards the double functioning of domestic spaces** - The perception of dwellers to the home-based work
- **Domestic Space configuration** - The dwelling space, courtyard and neighbourhood street, appropriation of the domestic setting
- **Potential and challenges of the HBIG (home-based income generation)** - The benefits (potential) and costs (challenges) of the home-based work

Source of data

- **Government agencies** - Data to understand the context of the case area (Addis-ketema) was obtained from the Addis Ababa planning institute.
- **Organization for women in self-employment** - To understand the HBE they under take the women in self-employment, data from this organization were reviewed thoroughly.
- **Individual dwellers** - To gain data regarding the space configuration, appropriation, and perception towards the home-based work and challenges and potential of the HBE
- **The physical Environment** - Space configuration and appropriation

2.4 Research Instruments

In order to collect valid data, to answer the research questions and achieve the research objectives, the researcher has developed the following research instruments.

2.4.1 Semi-structured Interview

A self-administered interview was done with household heads in the case-study area to obtain a broad range of quantitative data about the dwelling, household manager or head, household size and HBE, number of rooms, areas of rooms, occupancy rate (persons per room), space per person, areas used for HBE activities, shared spaces (HBE and domestic), dwelling improvements made, etc.

HBE operators were interviewed in order to record their own interpretations of their circumstances and the strategies they employ to cope with a range of frequently conflicting demands on domestic space, labour and time. Oral testimony approaches such as this offer great opportunity to examine issues, which are impossible to engage with in quantitative work and in the case of space usage, complement, and add substance to the physical and visual data: insights can be obtained into what cannot be seen or questioned superficially.

2.4.2 Measuring and Drawing

A subgroup of households was selected for more detailed documentation, including drawings, photography, and interviews. The preparation of detailed drawings of dwellings was fundamental to this thesis. For each dwelling, a detailed plan was prepared at 1:100 indicating the physical configuration as well as the position of all furniture and fittings at the time of the survey. Annotation especially on a second sheet (or overlay) was used to document the use of space, environmental conditions. As well as, supplementary notes: particularly critical was: the *location of HBE activities* (including 'passive' spaces for storage), *spaces shared with domestic activities, routes in or through the dwelling of customers, suppliers, waste collection* etc., and *Location of any environmental issues* (e.g. dampness, smells, hazards, ventilation or lighting problems, etc.). Graphic techniques based on recording the *geometry of the space* were unable to capture the dynamic nature of space use, particularly where activities and

spaces change diurnally, weekly or seasonally, and how they develop and change over longer periods (reflecting changing economic and household circumstances and priorities). Where possible additional notes were *used to indicate where certain activities take place at different times* (even though not at the time of the visit); the time dimension was however usefully engaged with in the detailed interviews.

2.4.3 Photo registration

Photography can be particularly intrusive within the private sphere of the home therefore special efforts were taken up to ensure that householders were comfortable about it. Expressed permission was always sought and where appropriate, respondents were encouraged to place limits on what was photographed. A series of photographs was taken of all dwellings in the sub-groups.

The aim was to create a detailed record of the key spaces of the dwelling, particularly those where HBE activities are taking place, and to document HBE activities. External pictures were also taken of the dwelling, open spaces, plots as well as streets and alleyways, especially where economic activities were present. The resulting images were carefully collated and captioned to facilitate cross-referencing to the data sets. These images prove vital in helping to interpret plans and useful in recalling places and activities later.

2.4.4 Direct Observation

Although much HBE activity is visible and can be documented directly using plans and photographs, many of the activities and boundaries between them cannot be seen nor readily comprehended without a much closer involvement with the people and access to the more intimate spaces of their dwellings. The researcher prepared field-notes to record observations and insights gained whilst in the field.

2.5 Operationalization of Variables

Table 2-1

Operational definition of variables

RESEARCH QUESTIONS	VARIABLES
How do the HBE operator households perceive the functioning of dwellings as both home & workplace?	<ul style="list-style-type: none"> • Costs & Benefits of the HBE • Space sufficiency • Importance of HBE (Economically)
What do the HBE operator households to make their domestic spaces generate income for them?	<ul style="list-style-type: none"> • Preparation of space for HBEs • Housing transformation • Changing the function of spaces • Constructing and placing simple structures for HBEs
How is the domestic space configured and used for home-based income generation?	<ul style="list-style-type: none"> • Extent of space use • Plot size • Gross space under HBEs • Net space under HBEs • Location of HBE activities • Boundaries • Gendered space & Activities (HBE operator & customer) • Shared spaces: conflicts • Timing for the HBEs • Allocation of time to HBE & domestic activities: conflicts • Seasonal activities: busy time and other days
What are the potential & challenges of overlapping domestic space and workspace?	<ul style="list-style-type: none"> • Conflict of double functioning of home • Risks to the home due to HBEs (health, security, crowding) • Nuisance related to HBEs (noise, bad smell & visual) • Influence of weather on HBEs • Potential of double functioning of home • Closeness to customer and service • Enhancement of security • Household participation & Supervision

2.6 Variables and Indicators

Table 2-2

Variables and indicators

RESEARCH QUESTIONS	VARIABLES	INDICATORS	INSTRUMENTS
1. How do the HBE operators HH perceive the functioning of dwellings as both homes and workplaces?	Perception of using home as workplace	<ul style="list-style-type: none"> Costs & Benefits of the HBE Space sufficiency Importance of HBE (Economically) 	interview
2. What do the HBE operator households do to make their domestic spaces generate income for them?	Preparation of spaces	Preparation of space for HBEs <ul style="list-style-type: none"> Housing transformation Changing the function of spaces Constructing and placing simple structures for HBEs (e.g. Veranda) 	Drawings (2D & 3D) Images Interview
3. How is the domestic space configured and used for home-based income generation?	Spatial configuration and use	Extent of space use <ul style="list-style-type: none"> Plot size Gross space under HBEs Net space under HBEs Shared spaces: conflicts Boundaries Gendered space and Activities (HBE operator and customer) Timing for the HBEs <ul style="list-style-type: none"> Allocation of time to HBE and domestic activities: conflicts Seasonal activities: busy time and other days 	Drawings Images observation
4. What are the potential and challenges of overlapping domestic space and workspace?	Conflicts and potential of HBEs	Conflict of double functioning of home <ul style="list-style-type: none"> Risks to the home due to HBES (health, security, crowding) Nuisance related to the HBEs (noise, bad smell and noise) Influence of weather on HBE Potential of double functioning of home <ul style="list-style-type: none"> Closeness to customer and service Enhancement of security Household participation & Supervision 	Interview

2.7 Research Population and Sampling

The population of this research area are members of an organization for women in self-employment in Addis Ketema sub-city. The total population size is 1,882 women organized in ten SACCOS (in eight *Woredas*). For this research, it was planned to explore the perception, space configuration, conflicts and potentials of HBE, using 15 WiSE from two SACCOS in woreda 3 of Addis Ketema sub-city. The method of sample selection for this research was 'purposive random sampling'. As much as possible; it assessed diverse types of HBE types, household and house characteristics. The sample was purposively selected from two SACCOS (out of the existing ten SACCOS). That means that a group of samples was selected from these two SACCOS in Addis-Ketema Sub city. Then from these two SACCOS 15 Households were selected randomly to ensure rep-

resentativeness. Through random sampling method, all the possible samples have same probability for being selected. There is a high likelihood that the randomly selected sample will be representative (Black, 1993).

Table 2-3

Density of sub cities and availability of WiSE

NO.	SUB CITIES	POPULATION SIZE	AREA IN (K.M2)	DENSITY POPULATION/(K.M2)	EXISTENCE OF WISE
1	Addis Ketema	255,092	8.64	29,524	✓
2	Arada	212,009	11.56	18,340	x
3	Lideta	201,613	12.40	16,259	x
4	Kirkos	220,991	16.26	13,591	✓
5	Gulele	267,381	32.73	8,169	✓
6	Colfe keranio	428,654	65.10	6,585	✓
7	Nefas Silk Lafto	316,108	63.59	4,971	✓
8	Yeka	346,484	82.30	4,210	✓
9	Bole	308,714	120.93	2,553	x
10	Akaki Kaliti	181,202	126.13	1,437	x

2.8 Difficulties and adjustment during the field work

During the fieldwork of this research, the researcher has encountered different difficulties discussed below. However, the researcher has done appropriate technical adjustments to cop-up those difficulties.

- **Interacting with the respondents**

Finding the respondents address was one of the difficulties encountered; however, with the help of the WiSE archival documents the researcher was able to find the dwellings of the respondents. The addresses listed in the archives was found to be out-dated, so HBE operators could only be located, when they were available during the saving payment schedule. The researcher met with them and went to their houses, fixed a schedule, and asked for other members within their neighbourhood.

- **Obtaining financial information**

Although the researcher has tried to find the income status of the respondents, to assess the HBE in terms of economic benefit, it was fruitless, due to the lack of interest and vague answering of the respondents.

- **Building reliance**

Besides, building a reliance to cooperate in answering the research question was a bit *challenging, since a number of studies have been*

carried out in the settlement thus some residents seemed to be tired of being interviewed. They respond saying things like:

“Different researchers have come to ask about our socio economic, house exetra exetra, yet we have not seen change in our life, why are you wasting your time and our time?”

- It was also noted that people felt some kind of interference into their privacy, especially when they were asked for permission to go inside the house and analyse issues of spatial qualities.

- Since the settlement is informal, several people have the feeling of insecurity on their property. Residents view researchers as government officials who might be planning to demolish their houses.

However, when the objective of the research was made clear to them, and with the help of the SACCOs coordinators’ introduction with the women, it was made easy.

- **Reviewing the research question**

When respondents were asked to clarify some answer they usually answer it saying ‘yes’ or ‘no’ so the research question was changed to semi structured question with in depth interview. Besides understanding the HBE characteristic was essential and observing the activity while it is happening was crucial and was done after the pilot was carried out. ♦

Source CSA: (2007). The 2007 Population and Housing Census Report & WISE pamphlet

PART 3

LITERATURE REVIEW

3.1 Understanding Home-Based Income Generation

3.1.1 Defining Home-based income generation

In the Ethiopian context, according to The Central Statistical Agency (CSA, 2003) that conducted a nationwide urban informal sector survey in January 2003; the informal sector is defined as:

- Home-based or individual establishment/activity operated by the owner with few or no employees;
- they are for the most part unregistered and operating on a very small scale and with a low level of organization;
- most of them have very low level productivity and income;
- they tend to have little or no access to organized markets, to credit institutions, to modern technology, to formal training and to many public services and amenities;
- A large number of them are carried out without fixed location or in places such as small shops, outlets or home-based activities;
- They are not recognized, supported or regulated by the government;
- They are beyond social protection, labour legislation and protective measures at the workplace.

To identify the households with informal sector operators, the CSA (2003) used the following criteria:

- At least one member of the household must be engaged in productive activity;
- Employment of the owner of the activity must be either an employer or a self-operated activity;
- The establishment/activity shall not be a corporate type of enterprise;

- The establishment/activity should not keep a complete book of accounts;
- Number of persons engaged (if any) including the operator must be less than 10;
- The establishment/activity should not be registered by any legal authority, which gives licenses.

Defining Home-based Work

Stresemann, W.P., (1987) claims that a home-based enterprise is not just a small business in a small structure, but a family operation in a dwelling. It is a functional and organizational unit of production, generative reproduction, and consumption within the social formation of the entire dwelling.

Lipton, (1980:20) discuss home-based enterprises as “family mode of production enterprises whose characteristics are as follows:

1. The family controls most of the land and capital to which its labour is applied;
2. Most of the family's land, capital and labour are used in the enterprise; and
3. Most of the labour applied is provided by the family.”

As Ghafur (2002) stated it, ‘home-based work’ is a specific manifestation of urban poor women's involvement in the household production – reproduction sphere at the dwelling and its immediate neighbourhood context - the ‘local space’ (Moser, 1993, 1995; Moser & Peake, 1994). Local space is the setting where poor women live with the members of their households, and importantly, has been crucial for their appropriation of productive resources.

Hence, for this study home-based work is defined as involvement of women and family (households) in production and reproduction sphere, at the dwelling and its immediate adjacent domestic space.

3.1.2 Grouping of Home-based income generation

According to (Kellett, 2003 cited in Kachenje, 2005) home-based income generating activities are classified into five groups:

1. Sales
2. Commodities production for selling
3. Services
4. Activities with social character
5. Activities directly related to the lot and the open spaces

This study analyses all the classes, given that they exist in the study area.

3.1.3 Fungibility of Resources: Money, Time and Space

Fungibility of the main resource (space, time, and money) should be well understood, when conceptualizing the process of income generating at homes. Lipton (1980) stresses the advantages to home-based enterprises of being able to treat these resources fungibly: they can be converted swiftly, conveniently and without loss from one use to another.

Cash is the ideal fungible resource and money can be spent on improvements in living conditions or in working conditions (or both at the same time). Similarly, time spent on domestic activities can be converted into time spent on home-based enterprises as the ebb and flow of domestic work allows, and space can be used for a range of activities, which may change throughout the day as well as seasonally. All these changes can be made with minimal cost and inconvenience (Lipton, 1980).

The larger the dwelling the more sufficient is the space to enable activities to be defined in spatial terms with dedicated spaces for productive activities. With smaller dwellings different activities

have to take place within the same space, either simultaneously or having demarcated by time (Kachenje, 2005).

This implies that spatial and chronological aspects are both of importance here. Payne (1974) argues that high intensity of use within the confined spaces is possible because the “spatial and chronological symbiotic interaction of activities creates a greater effective space than exists physically” (Payne, 1974: p64).

3.1.4 Disadvantages (Costs) of HBEs

Costs of HBE have been identified by different researchers, such as: Gilbert and Gugler(1992), claiming that there is a close relationship between poverty, informal housing, and informal income generation; Benería and Floro(2005) point out the use of child labour; and Berik, (1987) and Ghvamshahidi(1995) cite that lack of special skills is associated with HBEs. Other costs of HBEs include the evasion of specific taxes, services charges and avoidance of regulatory requirements like licensing, resulting in lowering of fiscal returns to governments (Ezeadichie, 2012).

Ezeadichie(2012) and Strassmann(1987) point out that HBEs have been regarded as undesirable in planning orthodoxy due to devotion to uni-functional land use theories, as HBEs introduce commercial and industrial uses into areas zoned as residential. In most cases, the need for additional income through informal business ventures is the driving force behind dwelling alterations (ILO/ UNCHS, 1995). Okeke (2000) further noted that the extensive use of temporary structures, commonplace in this sector, exhibits very high nuisance value in land use development. The continued development of sheds for workshops and retail outlets results in a different physical neighbourhood character from that envisaged by planners, making such alterations a clear example of residents acting in defiance of official regulations.

Strassman (1986), in reviewing the effects of HBEs, confirmed that the worth of buildings in neighbourhoods with a high rate of HBEs is usually lower than those in neighbourhoods lacking them, since negative impacts, such as fumes from fish smoking, cause nuisance effects.

3.1.5 Advantages (Benefits) of HBEs

There is a strong relationship between housing and home-based enterprises, as dwellers are able to consolidate their dwellings and make ends meet through the income earned. In addition, many would not have a dwelling at all without their home-based enterprises, and many enterprises would not be in existence without the opportunity to use the domestic spaces (Tipple & Kellett, 2003; Mahmud, 2003; Strassmann, 1987). Thus, housing is crucial for the operation of HBEs in most countries.

According to Ezeadichie (2012), recent studies indicate that the share of the informal economy generally exceeded 60 per cent of total employment in all of Africa (African Development Bank, 1997). The informal economy also accommodated 75 per cent of the new entrants into the African labour force in the 1980s (Ezeadichie, 2012).

By the year 2020, it is estimated that 95 per cent of all African workers will be in the informal sector (Hope K., 2001). Hope K. (2004) stressed that given the current importance and potential of the informal sector as a source of economic growth and employment, most restrictions on this sector should therefore be eliminated so that it can flourish as a means of promoting further growth and reducing poverty and deprivation in the African economies. According to Tipple & Kellett (2002), HBEs are important for the households' incomes and quality of life. Without them, many would be severely hampered and it would be beneficial if policy could take account of this when considering any harmful effects they may have. For example, it may be better for a household to endure poor spatial conditions

than be plunged into dire poverty by having their livelihood removed. Such arguments and the trade-offs households make among their various assets coming to their own decisions, are at the heart of the current livelihoods discourses (Rakodi and Lloyd-Jones, 2002).

According to Johnson *et al.*, (2005) a house and a place for income generation are one and the same for poor people. The house is a place where they live and a space where they produce their means of subsistence. "A [house] not only provides a shelter and food but also is a place from which, and in which one claims an identity.... A human organism is intact with the building, the objects it contains, and its settings" (Nel N, 2002: 444). In addition to providing identity to members of the household, a house to the poor community in general and poor females in particular is a place where they use as a space for production.

3.2 HBEs and Configuration of Domestic Setting

3.2.1 House, dwelling and Home

Although the meaning of home, dwelling, and house are very much related to each other, there is no single and universally accepted definition of these terms. Yet, it is very important to define and demystify these three terms.

According to Jones *et al.* (2003) cited in Kachenje (2005), a house is simply a shelter that provides physical comfort. The concept of home goes beyond the physical aspects of shelter and comfort: When a house becomes a home, it ceases to be simply a shelter and becomes a space that contributes to emotional, non-material needs and well-being. Shelter and physical comfort are basic requirements of a house but do not, by themselves, constitute 'a home'. A home is constructed by attaching meaning to the physical environment, or because of personalization of the physical structure (the house).

Based on Tipple (2004) cited in (Kachenje, 2005) a house can consist of one or multiple dwellings, whereas a dwelling could imply a room that accommodates a single household. The room as a dwelling in that case has also to be multi-functional and perform as a bedroom, a kitchen and in some cases a sitting and even dining room. As such, a dwelling is connected with the building (the house).

In this study, all the three concepts are featured as follows, based on their respective meanings and depending on the context of a particular section of the report.

- A house - a shelter that provides physical comfort
- A home – a shelter and a space that contributes to emotional, non-material needs and well-being
- A dwelling – a multi-functional room that accommodates a single household

(Lacquan, 1983) quoted in (Ezeadichie, 2012: p50), criticized the action of urban planners who impose artificial restrictions on the use of the home and community for other uses. He states, “A major lesson for planners in the literature on slum and squatter community life is that housing is not for home life alone in such areas but also a production place, market place, entertainment centre, and financial institution, as well as a retreat”. Lacquan further argued that low-income houses and communities are essentially multifunctional units, and that the imposition of artificial restrictions on this diversity typically results in dysfunctionalities. Ezeadichie (2012), Kellett and Tipple (2000) and Strassmann (1987) as well echoed this view.

3.2.2 Space Configuration for HBE

Space in itself may be primordially given, but according to Samarasinghe (1997: 135) quoted in Kellett and Bishop (2003), the organization and meaning of space is derived from social translation, transformation and experience. This implies that spaces are socially constructed through the activities that take place within them. This presents a two way process, as:

...social interaction is in part constituted by its spatial setting – where things happen is part of the explanation of why and how they happen in the way they do. (The structuration theory of Giddens uses the concept of ‘locale’ to refer to the spatial context of action). ...The routine reproduction of the social world through interactions is accomplished within settings, which help to make such interaction meaningful and so to some extent predictable.

(Saunders & Williams, 1988:81-82 in Kellett & Tipple, 2003:2).

The way people use houses is a surprisingly complex issue. Daily family activities and use of domestic space are closely linked to individual, social and cultural factors as well as the spatial dimensions of their dwellings (Monteiro C., 1997).

According to Ghafur (2002), home-based income generation is carried out in spatial setting, that is, within a given dwelling and its broader physical context (local space). Hence, domestic spaces offer the possibility of accommodating as much productive activities as reproductive activities. The hierarchical arrangement of spaces that are used in home-based income generation includes dwelling, courtyard, lane or street (immediate to a given courtyard), broader neighbourhood, and lastly urban public spaces (outside neighbourhoods). However, for the purpose of this study, the focus is on the home-based activities undertaken in the first, second and third space hierarchies, because of their direct impact on the environment and the planning of the residential space.

3.2.4 Understanding Boundaries

The concept of ‘boundary’ is very crucial in analysing domestic space. (Lawrence, 1990, cited in Kellett and Bishop, 2003) point out the co-existence of productive and reproductive activities within a domestic setting provides an opportunity to examine how particular activities are conceptualized and the boundaries between them set. Therefore, to

understand the concept of boundary, the differences between the terms 'boundary', 'threshold' and 'interface' need to be clarified at this point. These differences derive mainly from their potential role to divide, connect and allow interaction, respectively. According to Hillier & Hanson, (1984), the nature of a boundary presents the fundamental property of disconnecting - and simultaneously defining - two domains; the domain that it encloses (interior) and the one that surrounds it (exterior). In addition to this physical division, the boundary also constitutes a primary social division for two groups: the users of the divided spatial domains; namely, the users of the internal structure (the inhabitants) and the users of the external domain (the strangers).

In turn, the potential interaction of the divided domains depends on the existence of thresholds within the boundary configuration and the potential for the boundary to work as an interface. The notion of threshold implies an entrance, while the interface suggests the allowance of interaction between the bounded system and its exterior. In other words, whilst threshold implies transition and therefore a change of status for the user, this is not necessarily the case for an interface (Hillier & Hanson, 1984).

Finally, boundaries are spaces that are influenced by the interrelations of complex socio-spatial domains. Accordingly, boundaries that structure the interior of the primary socio-spatial scale are usually referred to as partitions. Partitions divide functions within the interior domain and structure an arrangement of private, communal spaces and intermediary ones (semi-private, semi-communal) (Hillier & Hanson, 1984).

According to (Mahamood, A. N. (2007), boundaries can be defined spatially (e.g., walls, partitions, and décor), temporally (e.g., scheduling household or home-based activities), or behaviourally (e.g., allowing or denying clients/employers access to the residence and delegating paid and unpaid work).

Apart from being physically, marked boundaries can be conceptual. However, many boundaries are not expressed directly in spatial terms, nor do they necessarily map clearly onto social relationships (Kellett and Bishop, 2003).

3.2.5 Gendered Space and activities

'Home-based work' is a specific manifestation of urban poor women's involvement in the household production-reproduction sphere at the dwelling and its immediate neighbourhood context - the 'local space' (Ghafur, 2002). Mahmud, (2003) states that as the home is within the domain of women, it is they who perhaps play the major role in organizing the spaces for income generation as well as the daily life of family members. However, Gender of both HBE operator and customers can influence the spatial arrangements of this space (Kellett & Tipple, 2003). Yet, the meaning of space in home-based works, in terms of who uses what space at what time and for what purpose, has a gender dimension that is socially constructed and socially reinforced (Ghafur, 2002). ♦

PART 4

THE CASE STUDY

4.1 Introduction

This chapter presents the research findings and discussion of the case study. These findings are based on data collected using the research instrumentation discussed in chapter three. As much as possible the study findings were triangulated in order to cross-check the validity of the data and generate in-depth understanding of the issue under study.

This chapter is organized into three major sections. Immediately after this introductory section, it gives a concise description about the background of the study area (Addis Ababa, Ethiopia) and informal sector & MSE. Next, it presents the context of the case-area (Addis-Ketema) and background of the respondents (women in self-employment of Addis-Ketema) for clear understanding of the findings. Finally, it presents the case study.

4.2 Overview of the study-area

The informal sector and MSE in Ethiopia

Creating employment for Ethiopians is a major challenge; there are insufficient opportunities in the formal sector to absorb rural people and new entrants into the labour force. Consequently, many people have been forced into marginal activities in the informal sector as subsistence farmers, petty traders, and tiny handicraft producers with limited market scope. This conglomeration of informal and micro-enterprises is in need of significant upgrading if the Government of Ethiopia is to be successful in its efforts to eradicate poverty and to strengthen the private sector as a creator of employment and

economic growth. Part of this challenge will be changing attitudes about work in the MSE sector, and a revitalization of the “entrepreneurial spirit” in the country (Louis, S. and Annette, S., 2005).

Micro and small enterprises are a special focus of the government, given that they comprise the largest share of total enterprises and employment in the non-agricultural sectors. In recognition of the important role MSEs have to play in creating income and employment opportunities and in reducing poverty, the government drafted its first Micro and Small Enterprise Development Strategy in 1997. (MTI, 1997)

The Government is in the process of taking appropriate macroeconomic actions to support the development of the private sector, including many measures to support the development of small enterprises. However, under Ethiopia’s land tenure system, the government still owns all the land and provides long-term leases to the tenants. (Louis, S. and Annette, S., 2005) point out, this system continues to hamper growth in the enterprise sector, as entrepreneurs are unable to use land as collateral for loans, and this affects women more so than men.

Ethiopian MSEs are confronted by many of these problems. According to the CSA Report (1994-1995), the major obstacles experienced by small-scale manufacturing industries were the irregular and erratic supply of raw materials and a shortage of *suitable working premises*. The lack of *working premises* was also found to present difficulties for the informal sector operators who, faced with insufficient capital, were often impeded from the start. The problems of

raw material shortages, lack of working capital and effective marketing practices faced by small manufacturing industries result in the failure of these businesses to expand. The same sets of problems, when experienced by informal sector operators, have the effect of preventing their expansion almost from the beginning of their operations.

Results of the 1997 CSA Survey showed that for about 50 per cent of informal sector operators, the first major difficulty when starting their operation was the lack of sufficient initial capital. According to their responses, this problem becomes more critical when they intend to expand their businesses.

Until 1997, there were no organized policy and support systems catering to the development of the MSE sector, so structural, institutional, and policy barriers were not being addressed. Premises, markets, finance, supply arrangements, regulatory barriers and legitimization of entrepreneurial activity are among the most urgent.

4.3 The context of the case-study (WiSE of Addis-Ketema)

4.3.1 The context of the case-area (Addis-Ketema)

Geographical Location and Administrative Division
 Addis Ketema sub-city is one of the ten sub-cities in Addis Ababa City Administration. It is situated in the centre of Addis Ababa, bounded by from Southeast Lideta, from West by Colfe keranio from North East Arada and Gulele sub cites. At present, the sub city is divided in to 10 woreda 28 sub woredas, 84 sefer, and 302 blocks. Addis Ketema is one of the ten sub-cities of Addis Ababa characterized by high population density (31,440.3 population / Sq.Km).

- Population: 271,644
 - Male: 132,825; and
 - Female: 138,819)
- Area = 8.64 Sq.Km
- Density = 31,440.3 population / Sq.Km

Source: Addis Ababa planning and information institute in 2010

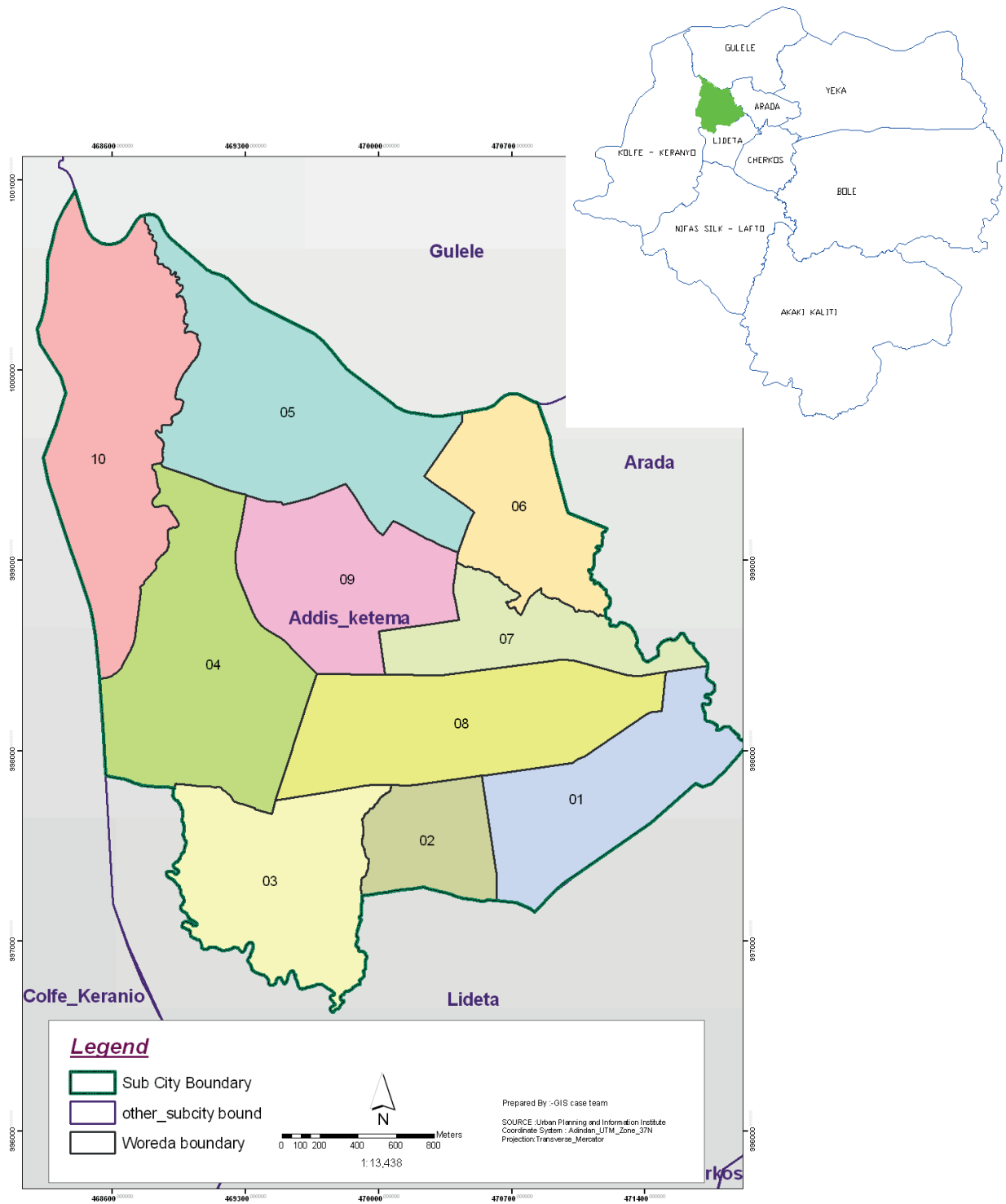
Table 4-1
 Spatial background of the sub-city

NO	WOREDAS	AREA OF THE WOREDA (HR.)	NO OF SUB WOREDAS	NO OF SEFER	NO OF BLOCKS
1	Woreda_1	76.7	2	8	28
2	Woreda_2	37.8	2	4	16
3	Woreda_3	89	3	9	32
4	Woreda_4	119.9	4	11	44
5	Woreda_5	126	4	12	46
6	Woreda_6	61.9	2	6	23
7	Woreda_7	49	2	6	18
8	Woreda_8	99.7	3	10	36
9	Woreda_9	78.5	2	8	29
10	Woreda_10	125.4	4	10	31
Total		863.9	28	84	302

Source: Addis Ababa planning and information institute in 2010

Figure 4-1

Location map of case area (woreda 3)



Source: Google satellite map 2014 and Addis Ababa planning & information institute, 2010)

4.3.2 The context of WiSE of Addis Ketema

Organization for Women in Self-Employment

Since its establishment in September 1997, the organization for women in self-employment (WiSE), an Ethiopian resident's charity, has been working with poor self-employed women and girls in urban areas, helping them to achieve self-reliance and improve the quality of their lives. In order to pursue this aim WiSE has developed a successful three-fold program strategy consisting of Organizing and Institutional Development, Enterprise Development and Learning and Strategic Partnerships.

With these strategies, WiSE has managed to reach out and fundamentally contribute to the economic advancement of over 24,000 women and girls, serving them to initiate or expand their micro enterprise operations. Through a system of saving and credit cooperatives (SACCOs) as well as a central union, a total loan of over birr 86 million has been disbursed. At present 52, SACCOs embrace over 12,000 active members. The loans made available to members of the SACCOs are used for the purpose of

- running micro and small businesses,
- making payment for condominium housing,
- Building or renovating residential house and covering children's school costs.

The target groups for WiSE's interventions are poor, self-employed women in Addis Ababa mainly engaged in home based production and micro scale trading activities and unemployed women who wish to engage in micro enterprise operation.

Currently WiSE focuses on the seven of the ten sub cities of Addis Ababa namely: Addis-Ketema, Kirkos, Nefas-Silk-Lafto, Akaki-Kaliti, Gulele, Kolfe-Keraniyo, and Yeka. The main justification for focusing in these geographical areas of Addis Ababa is the deepened poverty among most residents and that related socio-economic situations that challenge women's status and position.

WiSE and WiSE SACCOs in Addis Ketema

Currently, there are ten (10) WiSE SACCOs in eight (8) Woredas of Addis Ketema, and they embrace 1882 women in self-employment members. However, the researcher has selected 15 self-employed women from two WiSE SACCOs in Woreda 3 of Addis-Ketema, so called Amanuel Siket and Manayebet, yet, they are discussed here as one group, due to the similarity, since the naming of the group was used to group the women only.

Table 4-2

WiSE SACCOs, area and population size of Addis-ketema sub-city

NAME OF WOREDAS	AREAS OF THE WOREDAS (IN M2)	WiSE – SACCOs IN ADDIS-KETEMA	NO. OF MEMBERS
Woreda_1	76.7	Nega	168
Woreda_2	37.8	Dhinet Beka	182
Woreda_3* (Case Area)	89	Amanuel Siket*	260
		Man Ayebet*	204
Woreda_4	119.9	Enkidem	244
		Tesfa Alen	182
Woreda_5	126	Yetigle Fre	163
Woreda_6	61.9		
Woreda_7	49	Alem Birhan	203
Woreda_8 99.7		Berchi	157
Woreda_9	78.5		
Woreda_10	125.4	Enadgalen Gena	119
Sum	863.9		1882

Source: Addis-Ketema office of organisation for women in self-employment

NB: (*) = Study Area (research case area and case SACCOs)

Household Characteristics of Respondents

Demographic and socio-economic characteristics of the respondents by age, gender, level of education, family size and housing status (tenure type, number of rooms) are summarized in this section to have a better understanding of the profile of the respondents.

The most critical household characteristics considered are age, gender, educational attainment, and household size of respondents. The respondents consist of 47.8% male and 52.2% female. Results indicate that most of the respondents are within the working ages of 16 to 45 years, making up over 69% of the population.

The respondents are relatively literate according to UNESCO standards, which recognize “anyone who can with understanding both read and write a short simple statement on his or her everyday life” UNESCO, 2008, PP. 18) as being literate, with about 65% having a minimum of secondary school education.

About 86.7% of the respondents live in Kebele houses, sharing facilities with other residents. Average household size is 4-6 for the entire population (respondents). See ANNEX III: Household Characteristics of Respondents, p. 135. ♦

PART 5

RESEARCH FINDINGS AND DISCUSSION

This chapter presents the research findings and discussion of the case studies. These findings are based on data collected using the research instrumentation discussed in chapter two. As much as possible the study findings were triangulated in order to cross-check the validity of the data and generate in-depth understanding of the issue under study.

5.1 Domestic Space configuration for Home Based Work

5.1.1 Space Use in Home Based Work

The spatial configuration of dwellings and plots has implications on how space can be used, in addition to the scale of space available in the home. Besides, the spatial requirements based on the nature of the HBE activities also determine where these activities occur and how the domestic setting is used and configured.

Evidence (graphical & oral testimony) from the survey confirms that home-based work is not necessarily spatially confined within the dwelling. On the contrary, the dwellers perform different activities related to home-based work (e.g., producing, marketing, and selling products, and procuring raw materials) in various spaces, starting from their immediate domestic realm and greater neighborhood area and extending to the wider urban and/or rural realm inside/outside the city.

These findings depicts that an understanding of the role of space in home-based work require its examination not in isolation but in the spatial context of overall activities. This observation impinges on

the views forwarded by Rapoport (1990, 1982) in explaining how a given dwelling relates to settlement.

In home-based work, according to this view, a dwelling is situated in the wider context of a settlement, to which it is related through the complex activity system of its occupants. For example, most people do not use, act or live exclusively in one building; they use (or act in) various buildings, outdoor spaces, or settlements, which are not necessarily close together but may be spread through, within or between geographical regions. Therefore, a specific activity (in this case home-based work) needs to be studied not in isolation within a dwelling per se but in relation to a number of relevant activities, and their respective settings. Not only a dwelling itself is a setting, but it is also a part of 'system of settings', for the system of activities.

The spaces used for home-based work in addition to general household activities were identified by observations and in-depth-interview during the survey and then categorized and discussed in the following order: dwelling, courtyard, and lane or Neighborhood Street (immediate to a given courtyard). The following sections are descriptions of the types of settings and the ways they are used:

Figure 5-1

Hierarchy of domestic space use for HBE



Dwelling

By UN standards, approximately 80% of Addis Ababa’s dwellings are considered below standard or worse. The dominating typology within these informal sectors of the city are the so called “small houses and sheds”. The dwelling unit of these urban poor household is usually very small in size; this figure is a meager 24 Sq.m and houses an average of 5.7 persons (Felix H., 2012, p. 267). In this survey, 93.3% of dwellings were found to be non permanent structures and are often made with perishable construction materials (‘chika’).

During the survey, it has been observed that 60% of the HBE operator dwelling are single rooms. These rooms serve several functions, changes during the course of the day. The common reproductive functions performed inside the dwelling are sleeping, dining, and storage. Where space permits, the rest of the domestic functions (cooking, washing and bathing, latrine and social interaction) take place outside the one room dwelling. Dwellers spend most of their time outside the dwelling during the climatically favorable day, and utilization of the limited dwelling space is maximized by its multiple uses. Despite there being scarcity of space for performing basic domestic activities, the dwelling space is used in home-based work in three possible ways as follows:

Dwelling proper: an individual part of the living space, usually a corner of indoor floor-space.

Figure 5-3

Dwelling proper HBE activity 1 / © Author



Figure 5-4

Dwelling proper HBE activity 2 / © Author



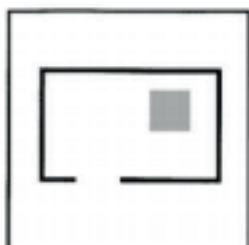
Figure 5-5

Dwelling proper HBE activity 3 / © Author



Figure 5-6

Dwelling proper type / © Author



Separate room: a separate working/commercial space converted by partitions from the main living space (however, this exclusive working/commercial space can also provide accommodation for a few persons).

Figure 5-10

Separate room HBE type / © Author

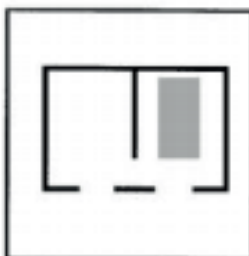


Figure 5-7

Separate HBE space / room / © Author



Figure 5-8

Dwelling proper HBE activity 2 / © Author



Figure 5-9

Dwelling proper HBE activity 3 / © Author



Figure 5-11

Open veranda used for HBE activity / © Author



Figure 5-12

Open veranda used for HBE activity / © Author



Figure 5-13

Open veranda used for HBE activity / © Author



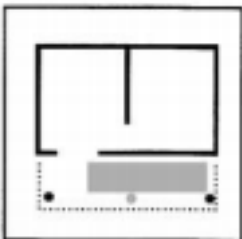
Figure 5-14

Open veranda used for HBE activity / © Author



Figure 5-15

Semi open veranda type / © Author



Semi-open veranda: the semi-open veranda at the front of a given dwelling used permanently/temporarily to carry out activities that cannot be done inside or for commercial opportunities arising out of the surroundings.

Courtyard

The courtyard is perhaps the single most essential element of the domestic setting for the urban poor households, due to the small size of the rooms, usually 22.5 sq. meters with high occupancy rate (4.5 people). The scale of the available space within the dwelling and favorable environmental conditions (lighting and ventilation) leads the dwellers to use this space often. A woman engaged in a traditional method of weaving cotton for cloths locally called “Duwur”, testifies this situation as follows.

“As you can see, I have only a single room and this HBE (Duwur) by nature creates dust. Working inside this small space does not create comfort, so I have to take it outside the building for this reason and when the weather is too hot to work at home.”

During the survey, it has been realized that courtyard space is used both in domestic activities and HBE activities, just like the dwellings of the HBE operators. Besides room scarcity and environmental conditions, the space necessities of these HBE activities determine to use this domestic setting often. For example, women involved in preparing spices (locally known as “Baltina”) and selling coal, prefer to prepare such activities outside the dwelling (usually the courtyard), due to the risks related to the HBE. Mrs. X engaged in preparing spices confirms this as follows:

“This HBE involves two preparation phases before I sell it to customers, which is preparation and packing of the product. So, When I am preparing this (food spice, ‘shiro’ and ‘berbere’), I have to take it in the courtyard, since this process involves unfavourable smell as well as an open space is required for drying the spices. Then I have to pack it at the front veranda.”

As it has been observed during the study generally, the courtyard essentially constitutes a private domain, shared by a number of households, both

tenant (private & kebele) and owners. Those courtyards are usually fenced, creating a separate private sphere, as guests are expected to knock at the door or make a sound before entering this private sphere. This space is dominantly used by women and children.

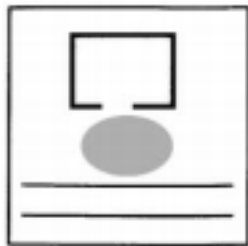
These courtyards show wide variations in configuration and appropriation by dwellers in the house. These wide variations have been categorized into three types to help understand how the socio-spatial domain of the courtyard has been appropriated for home-based work, in relation to the existing infrastructural components.

Courtyards are categorized into the following three types:

1. Basic type: the private domain of courtyard with its definite configuration is exclusive to a household's members for domestic and home-based work activities.

Figure 5-15

Basic type courtyard configuration / © Author



2. Composite type: the courtyard suggests a setting for more complex organization of domestic and home-based work activities.

Figure 5-16

Composite type courtyard configuration / © Author

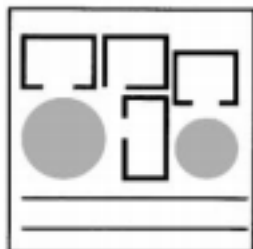
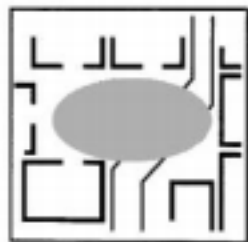


Figure 5-17

Overlapped type courtyard configuration / © Author



3. Overlapped type: The courtyard not only belongs to a number of households, but also may contain infrastructure components (e.g., tube well, lamp post, circulation paths, drains, etc.) for consumption by surrounding households. The absence of non-neighbourhood people and the activity concentration by the neighbourhood (mainly female) people make it a semi-private space.

Neighbourhood street

The neighbourhood street/ lane is a crucial space for the home-based operators to perform both domestic and HBE activities. As a result, appropriation of a lane/street for home-based work adjacent to the dwelling has been observed based on the nature of the HBE type. This space is used both as a preparation and display area, especially for the women involved in selling some daily need products (Injera, Vegetables and coal, etc.). People's use of streets varies according to the time of day. A woman involved in selling Injera describes this situation well as follows:

“Although I use my home to sell the Injera I baked during the day-time, yet I have to take it and display it in the neighbourhood street in the evening to meet additional customers. If I did not display the Injera I baked for market on the nearby street, it will be out of use and my income as well incurs a loss.”

The streets are diverse in their sizes, extent of traffic (vehicular and pedestrian), materials (stone paved, asphalt and rammed earth) and locations relative to a given city network and adjoining neighbourhood density and they contrast in how they are used. In areas where there is scarce space and a high number of households, both the activities of the domestic and HBE out flows to the available adjacent street/lane.

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Figure 5-18

Neighborhood street used for domestic and HBE activities



Figure 5-21

Neighborhood street use for HBE



Figure 5-19

Neighborhood street use for HBE



Figure 5-22

Neighborhood street use for HBE



Figure 5-20

Neighborhood street use for HBE



The nearby streets are used for drying and preparing of spices used in the HBE activity
The neighborhood street is used for different HBE and domestic activities, such as selling vegetables, coals and cooking outdoors.

5.1.2 Use of home for HBEs

Number of rooms and space used for HBE

Space is a fundamental resource in the operation of HBEs and is included in Lipman's (1980) list of fungible assets which make the home a valuable place in which to carry out economic activities. According to Tipple G. & Kellet P. (2004) space can be measured as discrete spaces (usually rooms) or as square meters available, each giving a different indication of conditions.

The subdivision of a dwelling into rooms facilitates the separation of people and activities. Different subdivisions of the same amount of space in different ways can change the usefulness of the space available. This was observed during the study. The dwellers engaged in HBE activities where dwelling space is scarce, were able to maximize the use of dwelling space.

The amount of space used by HBEs and its proportion with regards to the whole dwelling are important environmental issues. It is assumed that using lots of space for the HBE is harmful to the living environment. Thus, in order to assess such issues, the number of rooms and areas dedicated exclusively to or shared with HBE activities was assessed. Hence, as the results show, 60% of dwellers have a single room, 26.6% possess 2 rooms and 13.3% dwellers have three rooms. Where the activity is carried out in the dwelling only, 2.5 square meters are exclusively used for HBE purpose.

The study found many HBEs even on very small plots in the case-area; some even had three HBE operator households in one courtyard. A large number of households had not allocated a separate room for the HBEs. Indeed, 60% used the public space in front of the plot for preparing and displaying their products. Hence, lack of space does not seem to be a reason for not having an HBE. The HBEs in this sample do indeed occur in even the smallest dwellings and occupy very limited space therein. The occupants

regard some of the space used as exclusively for the HBE; others are joint HBE and domestic spaces. A very small space indeed (mean of less than 2.5 square meters) is devoted exclusively to HBEs.

The number of rooms and areas used as joint domestic and enterprise space is greater than the exclusive HBE space and follows a different pattern among the samples. It has about 2/3 of a room, 2.5 square meters in mean. While it does not constitute much of the dwelling, it is undoubtedly extremely important to both domestic and entrepreneurial uses in the very constrained dwellings.

5.1.3 Space available in the home

The selected dwellings and HBE activities in this study were very helpful cases for understanding the effects of home-based work on the available domestic space. The settlement composes of a variety of spatial setting. As discussed in previous sections, the dwellings as well are composed of a wide variety of spatial settings both in indoors (different room number; single rooms, partially partitioned rooms and rooms having a clearly defined space division, etc.) and outdoors.

The dwellings in the case study area are very small, covering the whole tiny plot. 73.3% of the case-study rooms are single storey and 26.6% are single storey rooms turned into two storey buildings by the HBE operators, thereby effectively creating a kind of an attic. They have an average 22.5 square meter area divided into few rooms, either using a curtain or a proper wall partition. During the study, it has been observed that in most single rooms (77.78%) the house is divided into two functional rooms, which is most often (46.6%) a bed room area and a multi-use room.

These dwellings accommodate a mean of 4.5 people and HBE. Although the rooms are very small having an occupancy rates of 3 people per room, the HBE operators testify that scarce space of homes is not an obstacle to accommodating HBE.

From the survey it has been observed that 60% the respondents' rooms are single rooms. As a result, the seriousness of crowding comes out in the HBE operators dwelling having a single room, when we consider space per person. HBE operator households have 3.5 square meters per person and 60% have less than 3.5 square meters per person.

5.1.4 Effects of HBE on domestic space

In order to assess the impact of HBEs on the space available, a variable (net HBE space) by aggregating the space used exclusively for HBEs with half of that used jointly between HBE and domestic uses is used. This is reasonable for calculating the HBE space use as it reflects at least some of the reality of room use; the HBE may “get in the way” of domestic life in those rooms which are shared with the enterprise but does not prevent at least partial domesticity.

▪ Extent of space use

This section discusses the amount of space available and the extent of the domestic space shared for domestic and HBE activity. This helps to understand the impact of HBE on the available space. This is done by measuring the available plot area, room areas (exclusively and shared for HBE) and in-depth interview of how and where HBE activity is carried out within the given domestic setting. As these activities also changes diurnally, a clear understanding of where these activities are practiced during different times of the day and season was sought.

▪ Plot size

Table 5-1

Plot size ranges

PLOT SIZE RANGES (IN M2)	NUMBER OF PLOTS
< 150	3
151 – 200	8
201 – 250	2
251 - >300	2
> 300	-
Total	15

▪ Gross and Net space for HBEs

Table 5-2

Net space usage calculation

	MEAN	MEDIAN
Size of dwelling (square metres)	22.5	18
Net HBE space* (square metres)	2.5	3.0
Percentage of dwelling space	30	35
Net domestic space* (square metres)	20.5	16
Percentage of dwelling space	70	65

* HBE space and half mixed space

▪ Crowding

Table 5-3

Crowding indicators

	MEAN	MEDIAN
Net domestic space* per person (square meters)	3	2.5
Net occupancy rate (persons per room)	4.5	4

5.2 Adaptation of domestic space for HBE

5.2.1 Actors involved in adaptation

Actors involved in adapting space are the owners of HBE, be it private owners or tenants (from kebele or private). However, during the survey, it has been observed that 86.6% of the dwellers live in ‘kebele’ houses. Basically, none of these buildings are designed by architects. Hence, a very interesting phenomenon architecturally is the adaptation of spaces within ‘kebele’ houses.

It is forbidden to renovate or repair a ‘kebele’ house unless the situation is life threatening. Although adjustment of these houses is forbidden, out of constant lack of space dwellers adopted several ways to maximize the same, without it being visible from the outside. Usually, they built an attic (Amharic term: ‘kot’), used as storage and bedroom.

The adaptation of domestic settings needed for the HBE activity can range from simple (cleaning and setting the work space) to comprehensive (adjusting partitions, constructing rooms, building temporary movable structures, etc.). Hence, based on the simplicity / difficulty of the task done to prepare the space, the actors involved ranges from the family members (women and children) to hired skilled persons. The testimonies given by the HBE operators reflected this preparation of spaces:

“When I am preparing to work, my children will help me taking the machine outside of the room, as I cannot carry the machine and take it downstairs by myself” (an interview with a woman working a ‘duwur’, 2014)

Figure 5-23

Adaptation of dwelling/ © Author



5.2.2 Adaptations of the domestic setting

This section discusses the findings on how and to what extent HBE operator households prepare the domestic setting for home based income generation. The study reveals adaptation of the domestic setting was a must to start any HBE. Households engaged in different HBE have adopted the domestic space, based on their personal interests, the nature of the HBE and the availability of the space to practice these activities. The adaptation varies from simple to comprehensive, from temporary to permanent and including the private sphere and public sphere. Those appropriation techniques are discussed in detail as follows with graphical and verbal testimonies.

The most common appropriation techniques observed for the preparation of the domestic settings are listed as follows:

- Building transformation (construction of new rooms, extension and enclosure of the veranda, adjusting partition of rooms and replacing the structure step by step)
- Changing the function of the space
- Constructing simple structures

Building transformation

Building transformation refers to- ...

‘an alteration or extension involving construction activity and using materials and technology in use in the locality’ (Tipple, 1991:4).

Alteration as one form of housing transformation is defined by internal changes of a building, without increasing the total net floor area of the house, whereas extension adds space to the layout of the building. Both alteration and extension have been continuously undertaken in the study area with the aim of preparing or increasing some space for HBEs. Of the 15 houses studied, nine have been transformed in one way or another, involving vertical and horizontal transformation.

To each of the transformed houses one or more of the following forms of transformation were applied:

- a. Construction of new rooms adjacent to the original house
- b. Extension and enclosure of verandas
- c. Adjusting partitions for rooms
- d. Replacing the structures step by step
- e. Constructing and placing simple structures for HBEs
- f. Changing the function of spaces

Constructing new rooms adjacent to the original house

Construction of new rooms adjacent to the original house is a form of housing transformation through which the owner adds new rooms later on to the house built initially. The addition is in a horizontal manner and varies in scale from one house to

another, but the purpose is to provide or increase space for accommodating HBEs.

Zahra (name changed for this), explains the reason for transformation of her house as follows:

“Initially I only had one room, yet it was difficult for me to accommodate both the HBE activity and domestic activity, when I gave birth to my first kid. So we constructed a new room to the original house to accommodate the HBE and domestic activity.”

However, constructing of new rooms for accommodating HBE activity is negligible in the kebele houses, as there is a distinctive law forbidding such activities. Besides, the dense settlement (scarce availability of open-space) also limits the horizontal extension.

Figure 5-24

HBE operators house showing scarcity of open space / © Author



Extension and enclosure of veranda

Apart from construction of new rooms for HBEs, it has become common for many households to extend the veranda and enclose it for purposes such as HBE working space and stores. This form of transformation uses comparatively limited additional building materials to adapt the veranda to the new desired use. Some households use this method due to limited funds for new construction and

others due to limited space that could allow construction in larger scale locally. The extension could also be used without any enclosure, depending on the nature of the products being sold and temporal nature of the enterprise. However, such a situation could mean vulnerability to dust and weather and it could necessitate taking the products in and out for security purposes when closing and opening respectively.

Figure 5-25

Open veranda turned into space for HBE activity/ © Author



Adjusting partitions for rooms

For most households the only way they can have more space is vertical extension, usually building a second storey, which they can use as a sleeping space, storage and working area. This kind of adaptation of

the dwelling is due to the scarcity of space for horizontal extension and the distinctive law preventing repairing the kebele house. Therefore, dwellers end up doing interior transformation to adjust the allocation of space for the various uses.

Figure 5-26

Mrs. Hadra Ahmed's dwelling – room adjustment/ © Author



In the study area, both demolition of interior walls and construction of partition walls featured as ways of interior transformation for HBE purposes. This maximizes the amount of space for the HBE operators. One of the respondents testifies this phenomenon as follows:

“Initially I only had one room, as my business grew I was forced to look for extra spaces for storing the products. So I decided to maximize the space by making a vertical extension (constructing a “kot”) and partitioning the room (creating a mezzanine floor).” (Interview with an HBE operator)

Figure 5-27

Mrs. Lackech Tekile's dwelling - vertical extension ('kot')/ © Author



Figure 5-28

Mrs. Abebech Gebeyehu's dwelling - vertical extension ('kot') / © Author



Replacing the structure step by step

Most of the kebele houses in the study area were built with building materials such as mud and pole. Tenants of these houses have been transforming them, especially the roofs where it is highly deteriorated and rainwater trips during rainy season. In this kind of transformation, rooms are replaced step-by-step while the house keeps on being used. During the survey two houses' ceilings were observed as being renovated.

Constructing and placing simple structures for HBEs

In situations where HBE involves displaying of products for selling, the nearby public space is adopted for this purpose. So, households in the study area erect structures made of corrugated iron sheets as walls and roofing to facilitate the running of HBEs. However, the structures do not have enclosure/walls, but just consist of wooden posts. This kind of structures is not meant for leaving properties overnight after the business closure, except for the ones that are guarded all night long.

Figure 5-29

Simple structure built for HBE purpose/ © Author



Changing the function of spaces

Changing the function of spaces is a most common phenomenon, due to the scarcity of spaces and financial capacity. In most cases, a single room is used for multipurpose (both domestic and HBE activities). The changing occurs diurnally and seasonally. For example, rooms used as a living, cooking and dining area during the day will be adopted into sleeping areas. Spaces that are involved in the changing include bedrooms, verandas as well as the open. In this case, no significant changes are made to the spaces, but only the change in use takes place regularly.

Figure 5-30

Changing of a function of space: this living space is used both for domestic activity (such as drinking coffee, dining, sitting) and by moving the furniture the house is used for HBE activity (pouring the detergent)./ © Author



5.3 Costs and Benefits of HBE

This section presents the findings on the main issues that arise due to the double functioning of dwellings (overlapping life space with workspace.) The issues emerging due to HBE are mainly categorised into two sections: firstly, it discusses the issues associated with the costs (disadvantage) of accommodating the HBE activities within the domestic setting. Secondly, it presents the benefits of home-based income generation (double functioning of dwellings) for the HBE operator households. It is clearly stated in the literature review, that the perspective on the issue of home based work is divided into pros and cons, stating its costs and benefits. As a result, this research has attempted to identify this phenomenon through in-depth interviews with the respondents.

5.3.1 Costs of double functioning of dwelling

▪ **Risks to the home due to HBEs**

Respondents pointed out and confirm that accommodation of HBE in the dwelling have associated risks, such as health, security, privacy and other aspects. Yet, the risks associated to the home based enterprise are various; depending on the individual characteristics of the HBE and the interaction with customers.

Figure 5-31

Woman involved in "Tela" brewing HBE's house/ © Author



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For example, a respondent (See picture above) involved in preparing a local drink called “Tela” explains her situation like this:

Risk is high, because when people get drunk they fight even using bottles or other weapons... Drunkards normally use undisciplined and abusive languages that are dangerous to our children’s behaviour (Interview with a HBE operator, 2014).

Another respondent (see picture below), involved in home based income generation that is selling of liquid detergent soap, also states her situation as follows:

‘When I am preparing for this job, I have to send my little kid to play outside by herself or with other kids, since I am scared of the chemical smell for her health, besides I have to be careful not to contaminate anything edible and drinkable.’ (Interview with an HBE operator, 2014)

Figure 5-32

Woman preparing detergent soap for sell/ © Author



Some respondents (see picture below) involved in HBE activities such as “Duwur” and tailoring, also reveal that the noise of these machines create disturbance:

Figure 5-33

Women working Duwur, tailoring and their challenges/ © Author



Mrs. Elfinesh Tadesse involved in duwur points out her challenges:

- Dust from the cotton scattering everywhere
- Noise from the machine
- Taking the machine outside for cleaning (energy consuming)
- Scarcity of space (crowding)



Mrs. Senait kerissa involved in duwur states her challenges as follows:

- Dust from the cotton scattering everywhere
- Noise from the machine
- Taking the machine outside for cleaning



Mrs. Hiwot Z. involved in tailoring discusses her challenges as follows:

- Noise from the sewing machine
- Using her bedroom as a store for sewed clothes

Another risk related to these HBE activities is creating a dusty environment. For example, a woman working a duwur, complains of the tiny dust of the cotton spreading all over the room and in the air as well. The family usually has to cover furniture, such as the sofas, TV, and dining table with plastics or take the work outside the dwelling.

During the survey it has been observed that some rooms are surrounded by risks such as fire. As can be seen in these two pictures below both the cooking and working activity are taken side by side to use the time interchangeably both for domestic and HBE activity. Thus, overcooking and unattended cooking stoves represent possible hazards.

Figure 5-34

Cooking (domestic activity) and HBE activity (tailoring, Duwur) taking place in the same area/ © Author



▪ **Nuisance related to HBEs**

Nuisance in this case refers to noise, bad smell and dust. Noise associated with the operation of HBEs turned out to be the most outstanding nuisance in the study area. Home based operators involved in preparing spices face the itchy smell of these products. Home based operators involved in selling of Injera bread also face the risk of smoke due to the traditional method of baking Injera. Another nuisance is dust, which also presents health risks to the operators and consumers. Women involved in ‘duwur’, tailoring and selling vegetables and charcoal are affected. Bad smell has been evident particularly at places where brews (local drinks) are sold. The smell is basically from the latrines many of which are of poor structural quality.

Figure 5-35

Nuisances due to home based enterprise:

1. Bad Smell from the tela residue damped in the ditch
2. Smoke from the kitchen during baking injera
3. Dust from the duwur work in the house / © Author



▪ **Weather related risks**

As pointed out in previous sections, some households operate their business enterprises in open spaces; hence, they are subjected to the weather variations. Some depend on roof overhangs, which provide too limited protection against rain, and some just use spaces without any shade. In case of rain, these households with their HBEs are vulnerable and compelled to move the commodities inside their houses for protection. Mostly HBE operators involved in selling Injera and vegetables are exposed to such risks. One respondent engaged in such HBE commented on this situation as follows:

This business needs to be exposed outside, so that customers can see what we sell. However, when it rains we remain without choice, but to rush inside with our products or cover it with plastic sheets. In that way we incur loss, as we cannot continue selling our products in the rain (Interview with a vegetable seller, 2014).

Figure 5-36

HBE activities risks related to weather (sun and rain)/© Author



▪ **Crowding**

It is inevitable that accommodating HBE in the house requires to share a significant portion of space, which is needed for domestic activity. It was visible that with regards to net and domestic space usage the HBE activity adds to crowding. Dwellings which were originally sufficient in size were rendered insufficient due to these HBEs taking some portion of the space. These eventually leads to adaptation of the space by different strategies discussed above.

Figure 5-37

HBE operators' houses reflecting crowding of space/© Author



Besides, some adaptations lead to blocking of openings, which worsens the situation. As can be seen in the next picture, a window was blocked to accommodate a stair for to the vertical extension of the rooms to gain additional spaces.

5.3.2 Benefits of double functioning of dwellings

▪ Closeness to customers and services

HBES attract customers from within the houses in which they are undertaken and the surrounding houses. However, other customers come from outside the study area as workers in some of the HBEs. As most of the HBE operators are involved in providing a daily needed services and products, it has been observed that the customers mostly come from the immediate neighbourhood. Given the demand of products offered by HBEs, there is almost an ensured continuous market for which to compete. Related to this factor of closeness are benefits such as:

a. Money saving

Respondents indicated that working at home enables them to cover their daily expenses. In addition to that, during the survey it has been observed that it is the primary source of income (livelihood) for the women involved in the HBE. Based on their membership in the organization (WiSE), some members are able to create job opportunity for others. Nevertheless, saving is mandatory for every member.

b. Time saving and convenience

One of the advantages of working at home, according to the testimony given by the respondents, is that they can use their time conveniently and interchangeably with their domestic work. Comparing this home-based work to other works done outside the house, they suggest working at home enables them to minimize travelling time from home to work place and back from workplace to home. Respondents clarify this phenomenon like this:

A woman (see picture below) involved in making a 'duwur' describes her situation as follows:

“one of the advantages of working at home is: I can work at any time, be it in the night or early in the morning, anytime I feel convenient to work.” – (Interview with a woman working 'duwur', 2014)

Another woman (see picture below) working tailoring also supports this idea as follows:

“As you can see me now, I am working (sewing) my customers' cloth, as well as preparing lunch for my family. Thus, working at home enables me to save time for working both the domestic task and the HBE activity.” (Interview with a woman working 'tailoring, 2014)

Another woman (see picture below) working distributing of detergent soap also emphasizes/supports this idea as follows:

“Working at home, this business enables me to look after my child, besides; I can use my space and my time both for the domestic activity and the HBE. In addition I can work the job at any time.”

c. Symbiosis in the phenomenon and optimal use of the house

One of the benefits of working at home is using the domestic space optimally and symbiotically with the home based work. Though the available space is scarce to accommodate home based work, the respondents testify that the only way they can afford to create the working space is to use their domestic space interchangeably.

▪ Enhancement of security

According to the testimony given by the interviewees', all respondents agree that working at home enhances the security of home. Working most of their time at home enables them to look after their houses.

However women who constructed a temporary structure (See figure below) to run HBEs at the neighbourhood street leave their properties there at night and hire a guard since they find it tiresome to move the HBE inside during nighttime.

- **Household participation and supervision**

As has been observed during the survey, women are not the only household members involved in running the businesses. Young members are likewise involved in different activities ranging from looking after the business, when parents are engaged in domestic activity at home, to tasks such as moving and preparing the workspace and work equipment.

Figure 5-44

A child helping her mother out/ © Author



Figure 5-45

Old woman working durwur use the help of her children to move her machine/ © Author



5.4 Perception on double functioning of Home

- **Double functioning of home**

Despite the fact that home based income generations are the primary income source to support the households, yet, respondents have different perception with regards to using the domestic space for home based work. These different perceptions are categorized in two: those who are for the HBE and those against it. This is discussed below as follows, with their testimony.

Respondents who support the integration of HBE activities into the domestic setting are households where the primary source of income is home-based income generation as well as households where the activity is taking place outside the house (courtyard and adjacent neighbourhood streets), the number of family members is small and room area ample. Besides, when no moving of the working equipment is necessary, respondents support the integration of HBE activities.

Even households with scarce space and large number of household members households have positive perceptions due to HBE being their main income source, enabling them to cover their daily expenses and save some money for extra needs.

However, respondents have a negative perception of HBE where the activity creates crowdedness, dust and noise. A woman engaged in preparing a local drink called 'tella' explains this phenomenon as follows:

“The problem with this home-based income generation is that when customers get drunk they make some noise, besides some clients through bad words. Additionally the smell of the drink is disturbing, yet, since I do not have a proper latrine, I have to spill it in the nearby street latrine.”

Interview with HBE worker woman, 2014

▪ **Views on the plot sufficiency for the double functions**

During the survey, respondents were asked to evaluate the plot sufficiency regarding the HBE activity they under take. Yet it has been observed that this question depends on the spatial requirement of the HBE activity undertaken. Some HBE activities are only limited to the house, while other HBE activities use the courtyard or outdoor spaces for this purpose. In such situations, the plot size and the number of households within that courtyard are the main determinants. However, the study area is a highly condensed area with only little space for moving around (access road). ♦

Table 7.1

Residents' views on plot sufficiency versus plot size

PLOT SIZE RANGES (IN M ²)	NUMBER OF PLOTS	VIEW AND NUMBER OF RESPONDENTS	
		ENOUGH	NOT ENOUGH
< 150	3	2	1
151 – 200	8	6	2
201 – 250	2	1	1
251 – 300	2	1	1

Figure 5-46

Courtyards with only open space for access/ © Author



PART 6 CONCLUSION AND RECOMMENDATIONS

6.1 Introduction

This research intended to contribute to the knowledge gap on how poor women households in the inner city, engaged in different home-based income generations, use their domestic space. Moreover, it assesses their likely effect both in the dwelling and in space immediate adjacent to the dwelling.

The findings from the field research and consecutive analysis of findings after the field work, have guided to draw the conclusion of this research. The answers of the four sub research questions are presented in the next four sections of this chapter and then in the conclusion those are summarized to answer the final research question. In the subsequent sections, descriptions about the interpretation of research result and what is an addition to the existing body of knowledge are discussed. Finally, this chapter includes some thoughtful recommendations for understanding the role of domestic spaces for home-based income generation to the poor urban poor households (especially, self-employed women).

6.2 Conclusion

Domestic space configuration for home-based income generation

From the survey result, it has been observed that home-based work is not spatially confined to the dwelling. However, dwellers perform both the domestic and home-based work activities in the dwelling and the immediate adjacent space to the dwelling. The spatial requirement of the HBE (e.g., producing, marketing, and selling products and

procuring raw materials) depends on the HBE type and the scale of the available space.

Hence, as a result the dwellers running HBEs perform both their domestic activity and home-based work activity interchangeably in the following spaces: the dwelling, the courtyard and neighbourhood street/ lane.

The spaces in the dwelling and adjacent to the dwelling are adopted based on the space requirement of the HBE. Indeed, requirements referred to by the respondents as environmental issues (e.g. ventilation and sunlight), risk (privacy, security), nuisance (noise, dust and smoke, etc.) determines where the activity takes place. Interaction with and attraction of customers based on the HBE type affects where to display the home-based income generation.

Adaptation of domestic spaces

Dwellers engaged in different home-based income generation activities have adopted a variety of space appropriation techniques in order to maximize the efficiency of the scarcely available space. The adaptation for HBE activities are ranging from simple (cleaning and setting the workspace) to comprehensive (adjusting partitions, constructing rooms & building temporary movable structures, etc).

The most common adaptation techniques observed during the study are categorized as follows: constructing new rooms to existing structures, extension and enclosure of verandas, adjustment of partitions for rooms, replacing the structure gradually, constructing and placing simple structures for HBEs and changing the function of spaces.

Actors involved in this process (adaptation and preparation of spaces) are both the family members and hired skilled persons. The scale of available space (usually, scarcity) and the nature of the HBE type (e.g. some HBE activities needs to be displayed outside which leads to construction of temporary structures in the adjacent public spaces) dictate the nature of adaptation.

Costs and benefits of HBE

HBE operators' views on benefits and costs of home-based income generation are divided between those who are in favor of it and those who oppose it. HBE operators' attitude towards HBE is based on the importance of the HBE generated income from the household, the impact of HBE on the available scarce space and related conflicts arising from HBE. The potentials of the home based work were pointed out as closeness to customers & service (time and money saving), and optimal use of the house, enhancement of security, household participation and family supervision. On the other side, disadvantages of the HBE are perceived to be nuisance related (noise, smell, dust and smoke, etc.), risks related (such as security, health and privacy), and crowding.

Perception on double functioning of home

Although home based income generation is the primary income source to support the households, respondents have different perceptions and attitudes with regards to using the domestic space for home based work. Respondents who appreciate the integration of HBE activities into the domestic setting are households where the primary source of income is the home-based income generation and when the activity is taking place outside the dwelling. As well as, dwellers with small household number and ample room area support the integration of the HBE activity as well as when there is no movement of the working equipment.

Remarkably, although households suffer from scarcity of space and overcrowding, they still have positive perceptions of HBE due to its being their

main income source, enabling them to cover their daily expenses and save some money for extra needs. However, respondents have a negative perception towards where the HBE activity creates crowdedness, dust and noise.

6.3 Policy recommendation

The survey depicts that home based income generation plays an important role for the poor urban households (especially, women headed households). Some households would not be able to survive without them. Ignoring these home-based income generating activities, their spatial requirements and their likely effect on the domestic setting would result in hampering the livelihood of many urban poor households engaged in this sector. Therefore, stakeholders involved in the planning and designing of the urban space should critically consider their role to enhance the livelihood of the urban poor and their spatial implications and requirements.

6.4 Design recommendation

Although, alternation/ adaptation of kebele houses is prohibited, dwellers still search for ways to appropriate the space and the building in order to accommodate the home based income generation and subsidize their family livelihood without, however, displaying it on the outside. Therefore, *understanding* and *providing spaces* for such activity is essential to create an economic sustainability for urban poor households in the inner city.

6.5 Further Research

This study has tried to assess the domestic space use of self-employed women engaged in home-based income generation. However, home-based work is done by both genders and to study from this perspective will be essential in future research.

Moreover, the study is delimited to studying the three most common types of spaces (dwelling, courtyard and neighbourhood street/ lane) used for HBE activities. However, the spatial confinement of the home-based work goes beyond this. Hence, HBEs' spatial implications should be studied at a larger urban context. ♦

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