

# The Impact of Rural Women's Employment on Their Empowerment at Household Level: The Case of Sebeta Hawas *Woreda*, Central Oromia, Ethiopia

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## Abstract

Women's participation in economic activities is considered as a vital factor for ensuring sustainable development. Accordingly, the Ethiopian government has enacted different policy measures which give due emphasis to enhancing women's employment opportunities in its effort to alleviate poverty. Such policy measures are also believed to redress gender inequality within households and the society at large. This paper attempts to analyse the impacts of wage employment and self-employment on wives' household decision-making power in their marital life based on the data generated from a rural community in Central Oromia, Ethiopia. The study employed mixed research methods. A survey was conducted to collect quantitative information from 555 currently married women residing in five sample *kebeles* in the study area. Propensity score matching method was used to estimate the effect of women's wage employment and self-employment on their decision-making power. The quantitative results were substantiated using the qualitative data collected using in-depth interviews, focus group discussions, and key informant interviews, which were analysed using constant thematic analysis. As argued in the theory of resources in cultural context, the results reveal that, irrespective of employment category, employment fails to positively affect the wives' household decision-making power. The paper, in general, argues that it is crucial to give due attention to the role of a web of power structures (socio-cultural, economic, and political) in order to effectively ensure women's empowerment and address gender inequality in the country.

**Keywords:** rural women's employment, empowerment, household, decision-making power, Sebeta Hawas, Central Oromia, Ethiopia

## 1. Introduction

Women's employment is expected to be linked with a range of social and economic changes. One of these is its effect on women's empowerment. The concept of empowerment, in general, has got an increasing attention in development discourses since the late 1980s (Friedmann 1992). Women's

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empowerment, in particular, has been an essential component of major international initiatives such as the Cairo Population and Development Conference of 1994, the Beijing Women's Conference of 1995 (FDRE 2014), and the UN Millennium Summit of 2000. With the intention to improve the lives of women in developing countries, international development agencies and feminists alike have rallied behind the concept of women's empowerment. Many writers have argued that, as power relations operate at different levels, so does empowerment (Mayoux 2000). For example, Malhotra *et al.* (2002) note that women's empowerment can be discussed at three different aggregation levels: micro level (individual/household), meso level (community), and macro levels (wider context including market and political system).

Women's empowerment at micro level, especially at intra-household level, is, particularly, an interesting topic to be studied in view of debates regarding the nature and internal dynamics of a household (Folbre 1986; Hartmann 2001). One of the most important characteristics of a household is its power structure; that is, the way decisions, affecting the household members, are made. Households and inter-familial relationships in a patriarchal society, in particular, as Malhotra *et al.* (2002) note, are the central locus of women's disempowerment. However, in practice, attempts made to directly address the problem at policy level tend to be limited. This is primarily due to the fact that policy makers, who often share the commonly held morality among the society that aims at maintaining the sanctity of the family as a sanctuary, are cautious about government interference in the private domain of the family. Hence, public policy has only limited room to directly manoeuvre issues of inequality within the family, which are often reflected in several areas, such as intra-family power structure, decisions regarding time and resource allocation in households, and associated changes in demographic behaviour. The most dominant approach, regarded to be a legitimate means, by which public policy can affect household processes and reduce women's dependency, is to alter the economic environment. In a sense, this means that the market forces should be allowed to influence the boundaries of culturally acceptable women's activity and identity.

In the Ethiopian context, women's labour force participation, as compared to that of men, is low. The national labour force statistics (CSA 2015: 35) shows that, in the year 2013, among the population aged 15 and above, male labour force participation was 89.6 percent, while that of female was 77.8 percent. Despite women's lower economic participation compared to men, it is worthwhile to note the emergence of two important trends over time. First, the data shows that women's labour force participation has shown improvement over time. For example, the female labour force participation had increased from 71.9 percent to 78.8 percent between 1999 and 2005 (CSA 2015: 35). Second, extending the comparison to the different employment categories, although men generally engage in both waged works and self-employed jobs than women, who dominate the unpaid family work, women are increasingly entering into waged work and self-employed work and the percentage of women in unpaid work has decreased over time. For instance, the national statistics (CSA, 2015: 44) shows that between 2005 and 2013, while the proportion of women engaged in wage work had increased from 6.5 percent to 8.9 percent, the increase for self-employment was from 27.3 percent to 31.7 percent. Conversely, the proportion of women engaged in unpaid family work had decreased from 67.7 percent to 58.7 percent during the same period (CSA, 2015: 44). This shows that women are increasingly entering into income earning employment.

The recent increase in women's participation in income earning can primarily be seen in light of government's increasing attention given to reduce poverty in the country (MoFED 2010). In line with this, job creation for the citizens, in general, and for women, in particular, has increasingly become a priority issue of concern by the Ethiopian government in its effort to alleviate poverty. Among others, the adoption of Micro and Small Enterprises (MSE) Development Strategy (MoTI 1997) and an increased access to microcredit access have enabled women to participate in productive activities, particularly in the informal sector, which mainly constitutes self-employment (Aragaw 2012). The economic development policy reform in the early 1990s, heralding a shift to export-oriented agricultural development, has also enhanced women's income earning opportunities in the country. Ethiopia has been experiencing an

unprecedented expansion of non-traditional export industries (NTEIs), which mainly include garment and floriculture industries since the mid-1990s. An important feature of the NTEIs is that they rely primarily on lower-waged female labour to compete in a highly competitive global market. Rural or peri-urban women in central part of the country (where the industries are mainly located) responded to these new opportunities in large numbers and are engaged in waged work in the industries. Tewardos (2010 cited in Tekalign, 2015: 1), for example, notes that women constitute more than 75 percent of the workforce in the Ethiopian floriculture industry.

At the heart of the Ethiopian government's policy initiatives that promote women's employment opportunities, one may directly note advancing the household poverty reduction agenda. Such policy measures are also believed to positively contribute in redressing gender inequality within households and the society at large. Poverty reduction and women's empowerment are seen as two sides of the same coin. The assumption is that increasing women's access to income will, in itself, increase household income, which will then translate into improved well-being for women and enable women to bring about wider changes in gender inequality. Despite such policy assumption, that women's participation in income earning activity plays a crucial role in determining their access to power, both within the domestic unit and beyond, the body of literature reveals rather a contested relationship.

Emphasising on the positive relationship, the liberal and Marxist scholars, including feminists of both persuasions, have argued that women's integration into the market is the key to their empowerment (Bergmann 2005; Blumberg 1991). Focusing on marital power in households, in particular, the resources theory explains spouses' differential marital power in terms of the difference in their access to resources outside marriage (Blood and Wolfe 1960). The resource theory argues that there is a positive relationship between women's access to income and their marital power. Consistent with the resource theory, some empirical works regard economic participation as a key factor in the process of women's empowerment. It has been argued that women's improved access to work ensures their financial independence, and hence enhances their bargaining power in the family,

which eventually gives women more decision-making power at home (Hancock 2001; Hashemi, *et al.* 1996; Seguino 2007; Majlesi 2016).

On the contrary, the dependency theorists, as well as many radical and socialist feminists, offered more sceptical, often pessimistic, accounts of the relationship between women's employment and empowerment (Hartmann 1981; Elson and Pearson 1981). Rodman's *theory of resources in cultural context* (Rodman 1972), which is also called the *normative resource theory* (McDonald 1980), in its attempt to simplify the understanding of the varying cross-sectional data on the dynamics between resources and marital power, typifies society along the continuum of societal development (from patriarchal to equalitarian stage) based on its family norms and argues that the relationship varies across the continuum of societal development. It claims that, while women's employment has a positive effect on marital power in a society that has normative flexibility about marital power, it has limited effect in a patriarchal society. The limited effect of women's employment on their marital power in a patriarchal society is primarily attributed to absence of ambiguity about marital authority in such society. In this regard, some empirical research findings from different developing countries have demonstrated that economic participation does not inevitably bring about women's empowerment (Goetz and Gupta 1996; Rahman 1999). The role of culture, as a mediating factor, becomes significant here. It is argued that patriarchal culture may constrain the potential positive effect of women's work on their empowerment by defining work as an extension of women's traditional responsibilities, hence undervaluing their economic contributions and achievements (Erman 2001). Additionally, women under patriarchal culture may not question gender inequality or even may remain vanguard to the *status quo*.

This study is informed by the recent change in rural women's economic participation in Ethiopia and the aforementioned theoretical and empirical ambiguity related to the impact of women's employment on their empowerment. Hence, the general objective of the study is to examine the impact of women's income earning on their empowerment at household level, focusing on the case of rural women in Sebeta Hawas *Woreda*<sup>1</sup> in Central Oromia, Ethiopia.

## 2. Methods

### 2.1. Geographic location and Socio-demographic characteristics

The study area, Sebata Hawas *Woreda*, is one of the six *woredas* found in Oromia Special Zone surrounding Finfine, Oromia Regional State. Sebata Hawas *woreda* extends from 8°37'20"N to 9°01'21"N latitudes and 38°25'00"E to 38°45'00"E longitudes. It is bounded by the city of Addis Ababa in the northeast, Akaki *Woreda* in the East, Welmera *Woreda* in the northwest, Burayu town in the north, and South West Shewa zone in the west and south. Sebata town, though separated from Sebata Hawas *Woreda*, is the administrative seat of the *woreda*. Sebata Hawas *Woreda* is divided into 42 rural *kebeles* and two town administrations, namely Tefki and Awash Melka Kunture (Figure 1). According to the Sebata Hawas *Woreda* Communication Office (SHWCO 2009: 5-6), the *Woreda* is categorized into two agro-ecological zones, namely the midland, locally called *badda dare* (88%), and the highland, locally called *badda*, (12%).

According to the 2007 national census data (OPCC, n.d.b: 11), Sebata Hawas *Woreda* was the highest populous *woreda* in the Oromia Special Zone surrounding Finfine of Oromia Regional State. It had a total population of 132,294, of which 68,133 (51.5%) were male and 64,161 (48.5%) female with a total of 28,207 households. The data also show that 94.4% (124,935) of its population were rural dwellers, while only the remaining 5.6% lived in urban areas (BoFED 2011:3). Orthodox Christianity was the most common (87.4%) religion in the *Woreda* followed by Islam (5.4%), 'traditional' beliefs (4.6%), and Protestant Christianity (2.4%) (OPCC, n.d.b: 298). The Oromo (76.5%) constituted the largest ethnic groups reported in Sebata Hawas *Woreda*, followed by the Amhara (12.1%), the Gurage (6.9%), and the Gamo and others (3.7%).



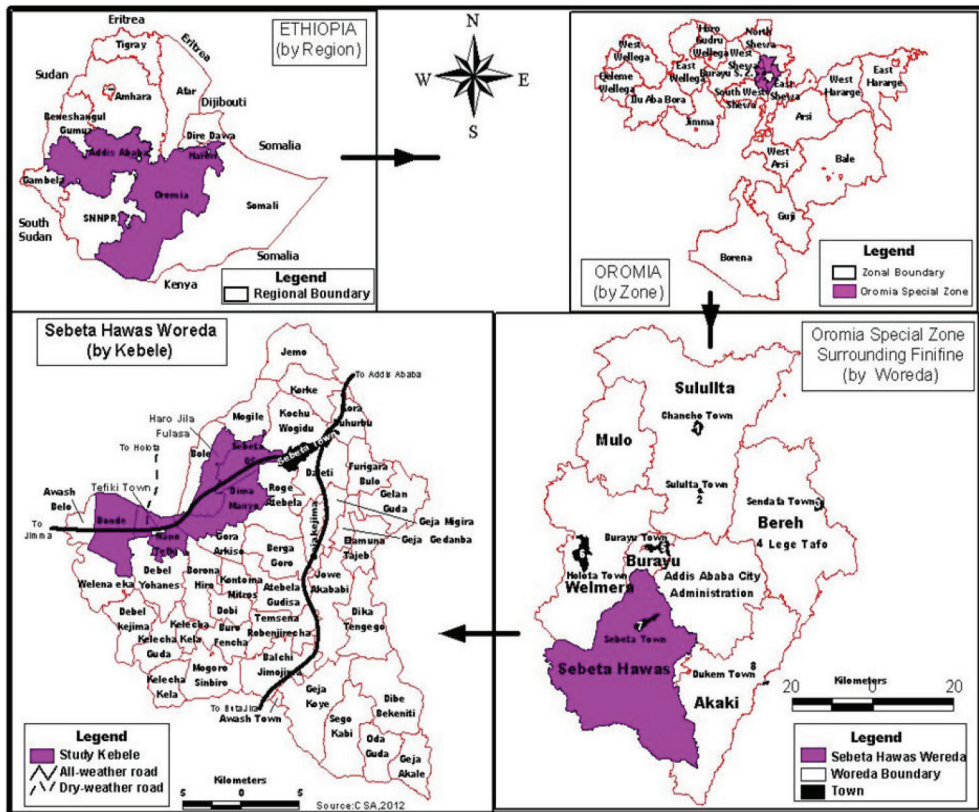


Figure 1. Location Map of Sebeta Hawas *Woreda*

Although the *Woreda* tended to be better in the education sector when compared to the national and regional levels, the different education indicators showed that access to education could still be considered low and the problem got worse when women and rural areas were considered. The 2007 census data, for example, showed that about 44.9% of the population in the *woreda* were literate when compared to the national and regional rates of 39.8% and 39.1%, respectively (OPCC, n.d. a: 232-233). Difference in literacy rate by sex was observed in the *woreda* with women having lower literacy rate (37.4%) than men (52%).<sup>2</sup> The data varied by place of residence and sex, with rural and female population taking a disadvantaged position. For example, while 32.1% of the total population aged 5 years and above in urban areas had never attended school, the figure reached 57.6% in the rural areas. Disaggregating the data by sex, about 60.4% of female and 49.0% of male aged 5 years and above in the *woreda* had never attended school.<sup>3</sup>

Agricultural activity was the dominant means of livelihood for the majority of the population in the *woreda*. About 90% of the population was engaged in agriculture, producing crops and rearing livestock, while the remaining 10 percent were engaged in business and craftwork as a major source of livelihood (SHWCO 2009: 6-7). Sebeta Hawas Woreda was, in general, among the major areas in the region where expansion of small to large scale private investments had been increasingly taking place. A Floriculture industry, in particular, had shown an increasing expansion in the *Woreda* since the last two decades, with most of the flower farms found in rural *kebeles* surrounding Sebeta and Tefki towns. Although the flower farms were also found in other *woredas* of the zone, Sebeta Hawas *Woreda* was unique, in a sense, that it was where private owned flower farms started operating in the country and relatively older flower farms were concentrated.<sup>4</sup> This, inevitably, had created job opportunities for the unskilled or semi-skilled rural women residing in the surrounding areas. The female unemployment rate in Sebeta Hawas *Woreda* was 3.4% (CSA 2010: 188), which was lower than both the national and regional rates of 6.5% and 4.6%, respectively (CSA 2014).

## 2.2 Overview of women's role in rural households

The rural women in the study area engaged in a number of activities, both productive and reproductive. In relation to reproductive roles, women bear and nurture children. They are also responsible for domestic works which include cooking, cleaning, fetching water, gathering firewood, preparing flattened dry cow dung (*kubet*), cleaning grains for household consumption, and carrying food and drinks for family members working in the field. With regard to the productive responsibilities, though mostly as unpaid family workers, rural women engaged in agricultural production and marketing. Although men are largely recognised for their farming work, rural women in the study area also spent quite a considerable time working on family farms by engaging in clearing away weeds, when men were ploughing, and harvesting tasks. Apart from engaging in unpaid family work in agriculture, women in the study area also engaged in income earning activities: self-employment jobs or wage works. While the self-employment jobs mainly refer to small home-based income earning activities, which primarily



include selling of local foods and drinks (*tella* and *arage*), other self-employment jobs include marketing grains, running small businesses, and craftworks (e.g., pottery). With regard to the wage work, agricultural labour and paid domestic works used to be the common jobs available for women in the area. Since mid-1990s, following the expansion of the NTEIs in the area, however, rural women had increasingly entered into these industries as paid labourers.

### **2.3 Research design**

The study employed the mixed methods research. This, obviously, contributed to the enhancement of empirical data by adding meaning, clarification, or illustration to a quantitative data by complementing it with qualitative data. The use of the mixed methods research is also pertinent in view of the key concept that the study deals with: empowerment. The complex nature of the concept of empowerment is widely documented (Malhotra *et al.* 2002; Kabeer 1999). Empowerment is multidimensional, multi-layered, and context specific concept. In view of this, neither the quantitative method nor the qualitative method, alone, is inherently sufficient in effectively measuring and understanding the issue at hand. This calls for the analysis of empowerment using mixed methods research that helps integrate insights and procedures from both quantitative and qualitative methods and draws on the comparative advantages of these methods (Brook and Holland 2009). An embedded sequential mixed research design was used in the study where the quantitative component plays a predominant role and the qualitative one offers a supportive role, and the qualitative data collection was made after the completion of the quantitative data collection and the preliminary analysis was made. Adopting the notation system of Leech and Onwuegbuzie (2009), the research design for this study can be represented as QUANT → qual research design). Hence, the fieldwork was designed to have two major phases that were conducted sequentially: the survey phase (April-September 2014) and the qualitative phase (May-June 2015).

### **2.4 Sampling strategy**

Sebeta Hawas *Woreda* was divided into 42 rural *kebeles*.<sup>5</sup> A multi stage sampling was followed in the study. In the first stage, i.e., selection of

sample *kebeles*, the distribution of flower farms, the major employers of rural women in the *Woreda*, was taken into account. This was crucial in view of the poor transportation system that was observed in the rural areas in the country. Accordingly, a total of five sample *kebeles* (namely, Sebeta 05, Dima Manyo, Haro Jila Fulaso, Bonde and Nanno Tefki), where almost all flower farms in the area are found, were purposively considered in the study.

In relation to identification of the sample households and the target women in the sample *kebeles*, the study used the dataset developed from a larger survey, which targeted a total of 851 sample households, that were randomly selected using Probability Proportional to Size (PPS) systematic sampling technique; size being the number of households obtained from the list of household registration obtained from the health posts of the respective *kebeles* considered in the study. Although a list of households was also obtained from each *kebele* administration, the one obtained from the *kebele* health posts was found to be up-to-date. The health extension workers prepared the household folder by undertaking the complete household registration in the *kebeles*, which was completed two months before the commencement of the survey. For the purpose of this study, which primarily intended to analyse the power dynamics in marital life, sample households, in which currently married women were not found, were excluded from the study. Accordingly, 550 households, in which currently married women resided, were extracted from the dataset and all currently married women aged between 15–59 years (555) living in these households, were the target women considered in the study.

## **2.5 Methods of data collection**

A survey was designed and implemented to generate a range of quantitative data. The data captured both household level and individual women's characteristics. The quantitative data, required for the study, were collected using two different types of instruments: the household questionnaire and the individual women's questionnaire. While the household questionnaire was designed to collect information regarding households (mainly, household asset ownership and socio-demographic characteristics of household members), the individual women's questionnaire was used to

generate a range of data regarding the individual women considered in the study. These include the women's general characteristics, marital characteristics, and decision-making practices in households. The quantitative data collection instruments were translated into *Afan Oromo* (Oromo language), a widely spoken language in the area. A pilot test was undertaken on women residing in 48 households in the area and modifications were made accordingly before printing of the final version of the questionnaires was made.

The qualitative data was generated through a combination of an in-depth interview, key-informant interview (KII), and focus group discussion (FGD). The in-depth interviews were held with a total of 34 selected women to capture rich and in-depth information on a range of issues, which included woman's working conditions and economic contribution to the family; decision-making practice in her household; and how her employment status affected decision-making power in a household. In relation to the FGD, a total of six focus group discussion sessions were organized. The number of participants in each FGD session ranged between six and nine women. A wide range of issues was raised during the focus group discussions. These included what the concepts, such as employment, marital power, meant to the women, how employment might affect marital power, and social attitude regarding wage employment and self-employment. Furthermore, key informant interviews were held with selected informants: senior residents (two women and four men), an expert from Sebeta Hawas Woreda Women and Children's Affairs Office, and three flower farm management members<sup>6</sup> (one manager, and two supervisors). The major issues that were elicited through the KIIs included cultural perception of women's employment and its associated meanings in the community, women's position in the community, how society perceived women's employment, institutional arrangements to enhance women's labour force participation and gender equality and the major policy implementation challenges, and labour conditions in the floriculture industry. The interviews and FGDs were set up at a time that was convenient to the interviewees/participants. The entire interviews and FGDs

were audio taped (upon permission granted from the participants) for transcription later on.

## 2.6 Methods of data analysis

After verification and coding of the filled-in questionnaires, the survey data were entered using Census and Survey Processing Software (CSPRO) version 4.1. The data analysis was done using SPSS version 20.0 and STATA version 12.0 statistical software packages. The study employed the percentage distributions, measure of central tendency, and post hoc ANOVA test for the descriptive analysis, while the propensity score matching (PSM) technique (Dehejia and Wahba 1999; Jalan and Ravallion 2003) was used to estimate the net empowering effect of the wage employment and self-employment among currently married women.

In applying the PSM, a quasi-experimental evaluation method, two separate datasets, namely WAGE\_EMPLOYMENT dataset and SELF\_EMPLOYMENT dataset, were created to examine the effect of wage employment and self-employment separately. While the WAGE\_EMPLOYMENT dataset contained women who were currently in waged labour and those who, at the time of the study, were non-income earning, the SELF\_EMPLOYMENT dataset contained women who were currently self-employed and those who were currently non-income earning women. In both cases, women who were currently non-income earning (i.e., either unpaid family workers or economically inactive) were considered as a comparison group, against which the two treatment groups (wage employed women and self-employed women) were compared and empowerment effects of the two employment categories were estimated. While the dataset used for the analysis of the empowering effect of women's wage employment contained a total of 352 observations (244 non-income earning women and 108 women who are wage workers), the one used for examining the empowering effect of self-employment contained a total of 447 observations (244 non-income earning and 203 self-employed women).

To avoid the missing data problem in the counterfactual (Heinrich *et al.* 2010), the PSM searched for each employed woman, one or more non-income earning women with the closest values of conditional probability of

participation, which was the propensity score,  $P(x)$ . Logit models were used in the estimation of the propensity score values. This means, matching estimators of employment effect imputed the missing potential outcomes using only the outcomes of the matched women from the comparison group. With the intention to ensure the reliability of the estimated treatment impact, three matching methods, namely the Nearest Neighbor Matching (NNM), Radius Matching (RM), and Kernel Matching (KM) were used (Morgan and Winship 2007; Imbens 2004). A t-test was used to check if balancing property was attained between the treatment and comparison groups on the covariates (matching quality) and the significance of the treatment effect. For impact analyses, *psmatch2* and the associated commands (such as *ptest* and *psgraph*) and *pscore*<sup>7</sup> STATA command were utilized.

In relation to the qualitative data, the study, specifically, used the method of constant comparison thematic analysis (Glaser and Strauss 2006), which helped identify themes that emerged from individual interview or focus group discussion. Obviously, this process involved reading and re-reading of the transcribed data. In general, in presenting the results of the qualitative data analysis, emergent themes were discussed in explaining the quantitative findings by providing verbatim statements (i.e., quotations) made by interviewees/focus group discussants, whenever possible.

### **2.6.1 Data Inputs**

In applying the PSM method for estimation of the empowering effect of wage employment and self-employment, three sets of variables needed to be identified. These were treatment variables, outcome variables, and the matching covariates.

#### **a) Treatment variables**

A treatment variable in PSM in general refers to the intervention variable, which is the characteristic on which two groups to be compared in the estimation of effect size primarily differ. For the analysis of the impact of women's wage employment on their decision-making power, the treatment variable is a dichotomous variable, "wage\_employment\_treatment", with two possible states; Yes (coded 1) if a woman is currently wage employed or No (coded 0), otherwise (i.e., if a woman is currently non-income

earning). Similarly, the treatment variable in the analysis of the impact of women's self-employment on their decision-making power is a dichotomous variable, "self\_employment\_treatment", with two possible values; Yes (coded 1) if a woman is currently self-employed or No (coded 0), otherwise (if a woman is currently non-income earning). The wage\_employment\_treatment and self\_employment\_treatment variables were defined in the WAGE\_EMPLOYMENT dataset and SELF\_EMPLOYMENT dataset, respectively.

### ***b) Outcome variables***

The outcome variable in PSM in general refers to the variable for which we intend to measure the effect of an intervention, i.e. empowerment level at household level. At a conceptual level, women's empowerment level is the outcome attribute we are interested to measure and see if it is impacted by women's wage employment or self-employment. Women's decision-making power is a commonly used indicator used in measuring women's empowerment at micro level (Grasmuck and Espinal 2000; Hashemi *et al.* 1996; Malhotra and Mather 1997). Accordingly, the study used women's asset-related decision-making power as a proxy measurement for their empowerment at household level. Hence, the outcome variable referred to as decision-making (asset related) index, constructed using the principal component analysis, measured the level of women's involvement in asset related decisions in households. In this case, five questions were asked to capture who was the major decision maker with regard to buying furniture/electronics (referred to as large purchases), buying and selling livestock, renting in/out land, allocation of land, renovation/ building/ relocation of house.

The possible responses were: wife alone (code = 2), joint decision (code =1), husband/somebody else (code = 0) which were further categorised in two major categories, namely wife involved (code =1) and wife not involved (code = 0). The "wife only" and the "wife and husband jointly" response categories in the original questionnaire were recoded as wife involved category. The third category, "husband or somebody else", in the original questionnaire was renamed as wife not involved response category. The two recoded response categories (wife involved and wife not involved)

were used in computing the standardised *decision-making (asset related) index* which was statistically checked for its reliability.

### ***c) Matching covariates***

In the absence of an experimental design, women's assignment to treatment is frequently non-random, and thus, women receiving treatment (wage employed or self-employed) and those excluded from treatments (non-income earning) might differ not only in their treatment status but also in other characteristics. Matching methods were designed to ensure that impact estimates were based on outcome differences between comparable individuals. The PSM uses the propensity score on which individuals match for estimation of the treatment effect. The propensity score takes into account all possible observable characteristics on which the treatment and the comparison groups systematically differ. The purpose of identifying the matching covariates is to resolve the systematic difference existing between the treatment and comparison groups. Accordingly, various matching covariates were identified and the logit model was used to estimate the propensity score. Some of the matching covariates captured differences among women in the treatment and comparison groups in relation to their individual level attributes, such as education, birth cohort, and migration. Others were family-related characteristics, such as number of living children and spousal age difference. and household characteristics, such as household size, and household wealth index. The *kebele* and membership in women's/youth associations were also included among the matching covariates.

## **3 Results**

### **3.1 Description of the respondent women**

As indicated earlier, 555 currently married women aged between 15 and 59, residing in the sample households, were the target women considered in the study. The general description of all the women is given in Table 1. The median age of the women was 30 years. Large majority of the women were not educated or had minimal education. About 83.8% of the total women had no or only first cycle education. Additionally, most of the women were found to be non-migrant (71.5%), and had parents with no education (75.3%).



The number of living children the women had ranged between zero and 12 with a median of three children. Almost all the sample women (95.4%) had, at least, one living child at the time of the study. More than half of the women (59%) had pre-school child. The large majority of the women lived in relatively large households. About 93% of the women lived in a household consisting of at least one person apart from herself or her spouse.

Table 1. Socio-demographic Characteristics of the respondents (n=555)

<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
<b>Education</b>		
No education	413	74.4
First cycle primary	52	9.4
Second cycle primary	55	9.9
Secondary and higher	35	6.3
<b>Age (Median ± SD)</b>	<b>30.0 ± 9.67</b>	
<b>Birth Cohort</b>		
BirthCohort1995-99	20	3.6
BirthCohort1985-94	214	38.6
BirthCohort1975-84	185	33.3
BirthCohort1965-74	78	14.1
BirthCohort1955-64	58	10.5
<b>Migration status</b>		
Non-migrant	397	71.5
Migrant	136	24.5
Return migrant	22	4.0
<b>Pre-school children (Mean ± SD)</b>	<b>0.8± 0.84</b>	
No pre-school children	227	40.9
Pre-school children	328	59.1
<b>Living children (Median ± SD)</b>	<b>3.0 ± 2.34</b>	
No child	31	5.6
1-2 children	175	31.5
3-5 children	232	41.8
At least 6 children	117	21.1
<b>Ethnic group</b>		
Oromo	482	86.8
Others	73	13.2
<b>Religion</b>		
Orthodox	485	87.4

<b>Variables</b>	<b>Frequency</b>	<b>Percent</b>
Others	70	12.6
<b>Household size (Median <math>\pm</math> SD)</b>	<b>5.0 <math>\pm</math> 2.09</b>	
1-2 persons	39	7.0
3-4 persons	193	34.8
At least 5 persons	323	58.2
<b>Parents' Highest education</b>		
No education	418	75.3
Primary	120	21.6
Secondary and above	17	3.1
<b>Membership in women/youth organisation</b>		
Yes	164	29.5
No	391	70.5
<b>Membership in microcredit</b>		
Yes	67	12.1
No	488	87.9
<b>Kebele</b>		
Bonde	86	15.5
Dima Manyo	61	11.0
HaroJilaFulaso	84	15.1
NannoTefki	59	10.6
Sebeta 05	265	47.7
<b>Employment Category</b>		
Non-income Earning	244	44.0
Self-Employment	203	36.6
Wage Employment	108	19.5
<b>Total</b>	<b>555</b>	<b>100.0</b>

Source: Survey data by the researcher, 2014

With regard to the ethnic group and religion of the women, the women were predominantly Oromo (86.8%) and had a religious affiliation of Orthodox Christianity (87.4%). Membership in a micro credit was rare among the women (12.1%), while about a third of the women (29.5%) had membership in women's/youth associations. At the time of the study, relatively larger proportion of women (44.0%) were engaged in non-income earning activities, while about a fifth and more than a third of the women, respectively, were engaged in wage employment (19.5%) and self-employed

jobs (36.6%). The average monthly earning of the women engaged in income earning activity was found to be low with a median value of 300 Birr (SD = 420.69). Despite the fact that both the wage employed women and self-employed women were low earners (with median monthly income of 526 Birr and 200 Birr, respectively), the former group, on the average, earned significantly better than the latter group ( $p < 0.001$ ).

Regarding distribution of women by their employment characteristics, almost all the non-income earning women (98.8%) were engaged in unpaid agricultural farm work (Figure 2). The self-employed women were generally engaged in small-scale home-based income earning activities with 77.8% of them engaged in selling local drinks and food. Among the wage employed women, quite a large majority (85.2%) were engaged in the non-traditional export industries (NTEIs), which referred to floriculture and garment industries, while only 9.3% were engaged in professional works that mainly constituted teachers and development agents.

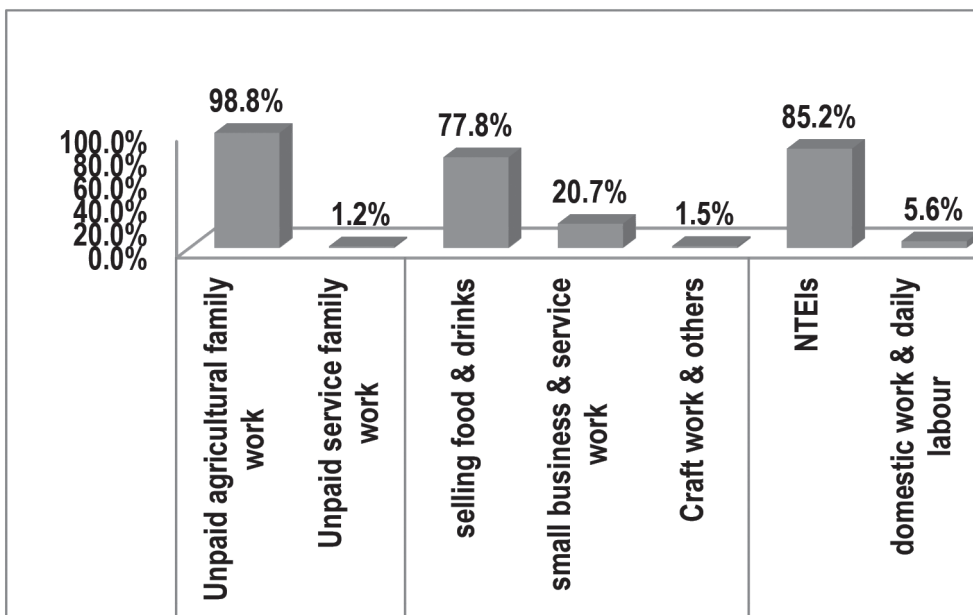


Figure 2. Distribution of the Respondents by Employment Characteristics (n=555)

Source: Survey data by the researcher, 2014

Of the women working in the NTEIs, those working in the flower farms were the dominant group constituting about 95%. The remaining 5%, who

worked in the NTEIs, were engaged in the two other export industries operating in the area, i.e., garment and cable factories. With regard to terms of employment of wage-employed women, 57.4% were permanent workers, while the remaining were found to be either temporary workers or daily labourers. Most of the temporary workers in the NTEIs were noted to work for a longer time than one might expect without being granted a permanent position.

Table 2 Distribution of average monthly income by employment types (n=555)

<b>Employment category</b>	<b>Median monthly earning (ETB)</b>
<b>Self-Employment</b>	<b>200</b>
Selling food & drinks	190
Running small business & service work	400
Craft work & others	160
<b>Wage Employment</b>	<b>526</b>
NTEIs	533
Domestic work & daily labour	220
Professional work & others	1100

*Source:* Survey data by the researcher, 2014

Table 2 presents monthly earning by employment characteristics. It shows not only the general picture that self-employed women earned lower than the wage employed women as was noted above, but also the variation in monthly earning within a given employment category (wage employment or self-employment) by employment type. As shown in Table 3, except in few of the cases, these differences in monthly income by employment types within each employment category were also statistically significant.

Table 3. Result of post-hoc ANOVA test (Tukey HSD) for difference in distribution of monthly income among wage employed women and self-employed women, by their respective employment types (n=555)

	Employment Type		Mean Difference (SE)
Employment Type (for Self-employment)	selling food & drinks	small business & Craft work & others	-330.96(59.03)***
	small business & service work	selling food & drinks	330.96(59.03)***
	Craft work & others	Craft work & others	363.67(180.31)*
	NTEIs	selling food & drinks	-32.70(198.17)
Employment Type (for Wage employment)	domestic work & daily labour	small business & professional work	-363.67(180.31)*
	professional work & others	domestic work & NTEIs	346.99(155.73)*
		professional work	-751.01(123.06)***
		NTEIs	-346.99(155.73)*
		professional work	-
		NTEIs	751.01(123.06)***
		domestic work &	123.06(190.86)***

\*  $p < .05$ ,

\*\*\* $p < .001$

As indicated in Table 3, for the self-employed women, women who were engaged in selling food and drinks and those who were engaged in craftworks did not significantly differ in their monthly earning ( $p = 0.869$ ). However, both groups earned significantly less than the women who were engaged in small businesses and service works. With regard to the wage employed women, the highest and the lowest earning in the group were noted for women who were engaged in professional work and domestic/agricultural works, respectively. The NTEI workers, constituting the largest proportion of wage employed women, earned significantly lower than women who were engaged in professional works, but higher than domestic workers/agricultural labourers.

### 3.2 Descriptive analysis

Before looking at the descriptive statistics of the asset-related decision-making index used to measure empowerment level, the distribution of the women's responses to the set of five items, that were used to construct the index, was considered. These referred to women's decision-making in relation to large purchases, buying and selling livestock, renting in/out land, allocation of land, and renovation/building/relocation of house. Figure 3

presents the percentage of women by the number of decision-making area they had participated in. About 40% of the women reported that they participated in all the five assets-related household decision-making areas, by making decisions either by themselves or jointly with their husbands. Over a quarter of the women (27.4%) responded that they were involved in not more than two of the five asset-related household decision-making areas considered in the study.

Since women might have the same number of decision-making areas by involving in different combinations of these areas, it was useful to disaggregate the data further and see if there was any pattern on who commonly made decision in each of the five asset-related decision-making areas considered in the study.

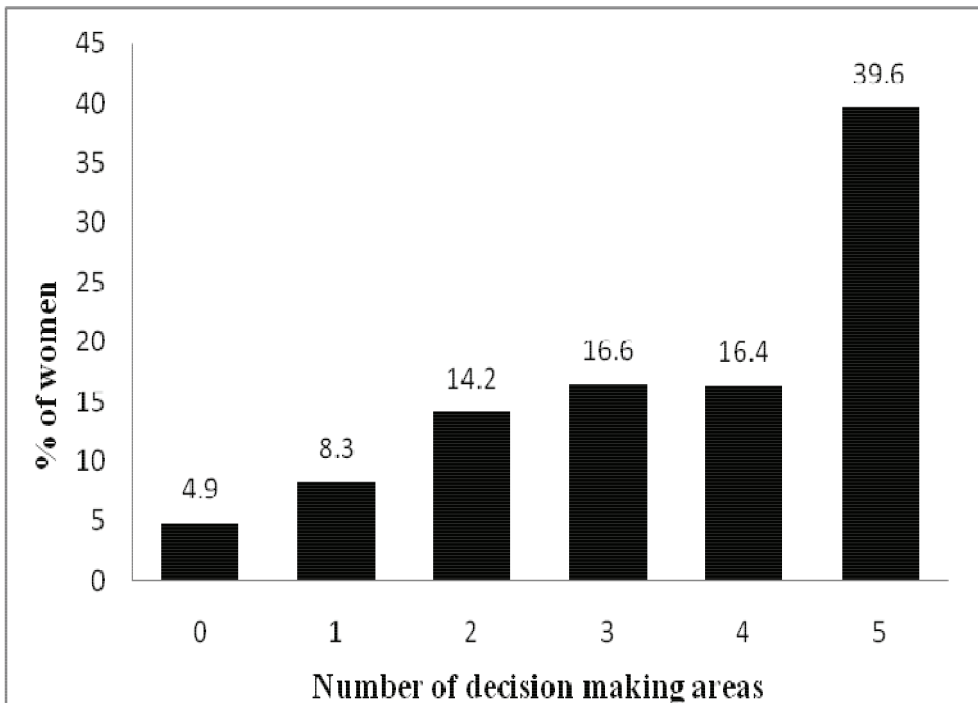


Figure 3. Percentage Distributions of Women by Number of Decision-making Areas They Reported to Participate (n = 555)

Source: Own survey data, 2014

Figure 4 shows that the reported level of women's involvement among the different decision-making areas varied to some extent. The most common role for the wife, in general, was joint decision-making with her husband. Although the practice of a wife being a final decision-maker seemed to be uncommon, they did not tend to be totally excluded from decision-making. Women tended to be better participating in buying and selling of livestock (81.4%), making large purchases (76%), and moving/renovating/building house (78.4%). Conversely, the lowest inclusion for the women was observed in household decisions regarding renting-in/out land (only 1.8% by wife alone and 57% jointly by husband and wife) and land use (3.2% by wife alone and 53.3% jointly by husband and wife).

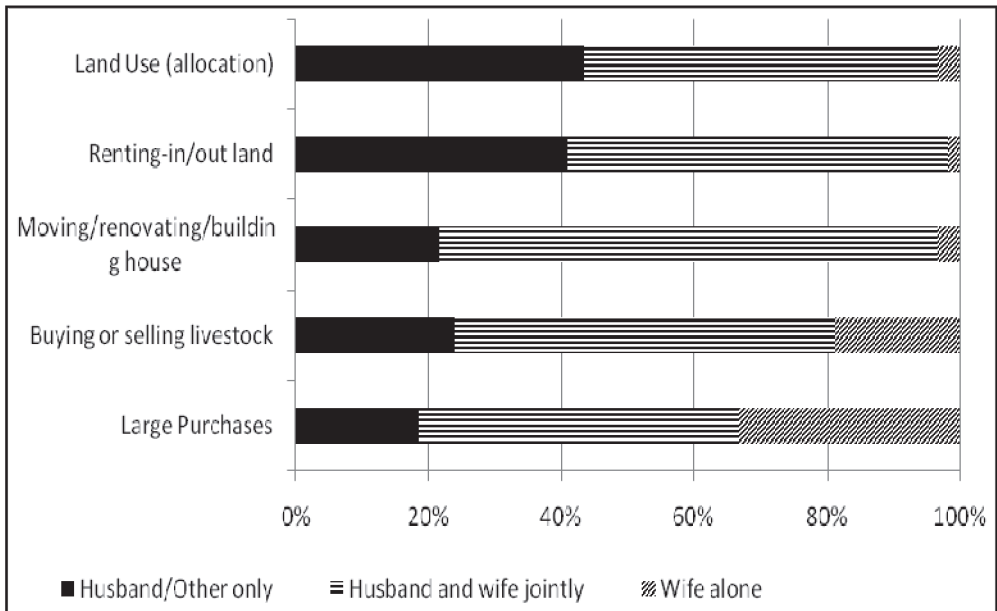


Figure 4. Percentage Distribution of Major Decision-maker by Asset-related Decision-making Areas (n=555)

Source: Own survey data, 2014

The decision-making power index was found to be internally consistent (Cronbach  $\alpha = 0.76$ ) (Table 4). Additionally, the index was standardized and ranged from the values of 0 to 1. The mean value of the decision-making (asset-related) index was found to be 0.70.



Table 4. Descriptive Statistics of the decision-making index (n=555)

<b>Employment category</b>	<b>Decision-making (assetrelated) index Mean ± SD</b>
Non-income earning	0.70± 0.30
Self-employment	0.70 ± 0.32
Wage employment	0.69 ± 0.31
<b>Total</b>	<b>0.70± 0.31</b>

Source: Own survey data, 2014

This table also reports the distribution of the index by women’s employment category. In this regard, equal mean value (0.70 each) of decision-making (asset-related) index was observed among the non-income earning women and the self-employed women, while the mean value for the index was slightly lower (0.69) for the wage employed wives. In addition to this pattern, based on the absolute figures, it is important to ascertain the statistical soundness of the absolute differences observed in the distribution of the index by women’s employment category. In this regard, the one-way Anova test result affirmed that distribution of the decision-making (asset-related) index did not significantly vary by women’s employment category ( $p=0.895$ ).

The following section verifies these findings and estimates the employment effect size corresponding to the decision-making power index controlling the potential systematic differences among wives in the treatment and comparison groups, using the PSM techniques.

### **3.3 The PSM results: Estimation of empowerment effect size of wage employment and self-employment**

Table 5 shows the mean distribution of some selected socio-economic variables between the comparison (non-income earning) and treatment (wage employment) groups from the WAGE\_EMPLOYMENT dataset constructed to measure the empowering effect of wives’ wage employment using PSM method.

The data in Table 6 also help to check if there is systematic difference in the distribution of some selected characteristics between women in the treatment group and comparison group.

Table 5 The mean distribution of selected socio-economic characteristic between the treatment and comparison groups (WAGE EMPLOYMENT data set)

Variable	Wage Employment		Mean (SE)	t (df)
	(treatment)	N		
<b>HH wealth index</b>	Non-income earning	244	7.15(0.34)	9.116(350)***
	Wage Employment	108	3.45(0.22)	
<b>Number of Living children</b>	Non-income earning	244	3.89(0.16)	8.23(350)***
	Wage Employment	108	2.03(0.16)	
<b>Household Size</b>	Non-income earning	244	5.52(0.140)	7.59 (350)***
	Wage Employment	108	3.93(0.157)	
<b>Highest grade completed</b>	Non-income earning	244	1.27(0.187)	-2.92 (350)***
	Wage Employment	108	2.53(0.389)	
<b>Spousal age difference</b>	Non-income earning	244	9.21(0.416)	3.86(350)***
	Wage Employment	108	6.46(0.511)	
<b>Number of pre-school children</b>	Non-income earning	244	0.77(0.052)	0.470 (350)
	Wage Employment	108	0.72(0.078)	
<b>Age</b>	Non-income earning	244	34.09(0.691)	5.74 (350)***
	Wage Employment	108	28.50(0.685)	
<b>Number of male children</b>	Non-income earning	244	1.84(0.097)	5.99 (350)***
	Wage Employment	108	0.99(0.102)	
<b>Total</b>		<b>352</b>		

\*p<.05      \*\*p<0.005      \*\*\*p<0.001

The results presented in Table 6 showed that most of the characteristics were significantly different in their distribution among women in the comparison and treatment groups. For example, women in the treatment group (wage employed women) had, on average, smaller number of living children and lower spousal age difference compared to women in the comparison group (non-income earning). Additionally, they were, on average, better educated, younger, came from household with lower household wealth status, or lived in households with smaller household size compared to women in the comparison group. Additionally, significant difference was noted in the distribution of the women in the comparison groups and treatment group by birth cohort.

Although the difference in the distribution of the women in the comparison groups (non-income earning) and treatment group (wage-employment) by birth cohort was not as pronounced as the one observed between the comparison and treatment groups of the WAGE\_EMPLOYMENT dataset,

some differences were also noted between the treatment and comparison groups in the SELF\_EMPLOYMENT dataset constructed to estimate the empowering effect of self-employment (not shown here). For example, for the SELF\_EMPLOYMENT dataset, women in the treatment groups (wage-employed) were observed to have lower mean household wealth index and larger number of pre-school children compared to women in the comparison group (non-income earning). Additionally, significant difference was noted in the distribution of women in the treatment and comparison groups by *kebele*, birth cohort, or their membership in women's/youth associations.

Table 6. Distribution of women between the treatment and comparison groups by selected socio-demographic characteristics (WAGE\_EMPLOYMENT data set)

Variables	Wage Employment		Pearson Chi-square (df)
	Non-income earning	Wage Employment	
<i>Kebele</i>	Bonde	38	9.42 (4)
	Dima Manyo	38	
	HaroJilaFulaso	32	
	NannoTefki	24	
	Sebeta 05	112	
Migration status	Non-migrant	180	3.53 (2)
	Migrant	56	
	Return migrant	8	
Birth cohort	1995–99	12	23.92(4)***
	1985–94	84	
	1975–84	74	
	1965–74	36	
	1955–64	38	
Parents' highest education	no education	191	3.89 (2)
	primary	48	
	secondary & above	5	
Membership in women's or youth association	No	183	0.83 (1)
	Yes	61	
<b>Total</b>		<b>244</b>	<b>108</b>

\*\*\*p<0.001

The aforementioned systematic difference between women in the comparison and treatment groups in both datasets highlighted the potential bias that might be introduced when estimating the empowering effect of employment from samples drawn without the benefits of randomization. Hence, the PSM was employed to estimate the net empowering effect of women's self-employment and wage employment by matching women in the respective treatment and comparison groups using the propensity score. A crucial step in implementing this method is estimation of the propensity score based on selection of adequate matching covariates that eventually ensures attaining adequate level of balance between the comparison and treatment groups.

Hence, alternative binary logit models were fitted by including different matching covariates to estimate propensity score for both the comparison and treatment groups on the basis of which matching was subsequently done (see Appendices A and B for WAGE\_EMPLOYMENT dataset and SELF\_EMPLOYMENT dataset, respectively). The final model in each dataset was chosen on the basis of the likelihood function and fulfilment of the balancing property of the covariates. Table 7 shows summary of the descriptive statistics of the estimated propensity score values for both the wage employment and self-employment treatment types. Applying the '*minima and maxima criterion*' condition suggested in Caliendo and Kopeinig (2005: 45-46) and Heinrich *et al.* (2010), the descriptive statistics of the propensity scores confirmed that the common support condition required in the PSM estimation was satisfied.<sup>8</sup>

For both the wage employment and self-employment treatment types (Wage\_employment\_treatment and Self\_employment\_treatment), as expected, women in the control group (untreated) were found to have a lower average propensity score compared to women in the treatment (treated) group. For example, in the WAGE\_EMPLOYMENT dataset, while the mean propensity score for women who were comparison group was found to be 0.23, the same estimate for treated group (wage employed women) was 0.49. This meant, the probability of being wage employed was, on average, lower for women who were non-income earning by 26% than for women who were wage-employed. Similarly, referring to the self-

employment treatment type, the mean propensity score for women who were in the comparison group, i.e., non-income earning women (0.39) was noted to be lower than that for women in the treatment group, i.e., the self-employed women (0.53) (Table 7).

Table 7. Descriptive statistics of the estimated propensity score

<b>Treatment variable</b>	<b>Untreated/ treated</b>	<b>Obs</b>	<b>Mean ± SD</b>	<b>Min</b>	<b>Max</b>
Wage-employment _treatment <sup>a</sup>	Untreated	244	0.23± 0.21	0.0000195	0.819177
	treated	108	0.49± 0.18	0.044367	0.853298
Self-employment treatment <sup>b</sup>	Untreated	244	0.39± 0.18	0.034275	0.852906
	treated	203	0.53± 0.17	0.151128	0.903922

<sup>a</sup>Wage\_employment\_treatment is a treatment variable in the WAGE\_EMPLOYMENT dataset

<sup>b</sup>Self\_employment\_treatment is a treatment variable in the SELF\_EMPLOYMENT dataset

The main purpose in the PSM was not the propensity score estimation *per se* but to adequately match women in the treated group to women in the control group using the predicted propensity score and to estimate the treatment effect for matched women in the treated group. Accordingly, the balancing property test results, generated using *pstest* STATA command (not shown here), ascertained that an adequate matching quality was statistically attained. This was indicated by the fact that the systematic differences that were observed on the different matching covariates between the treated and control groups, before matching, were eliminated after matching. This attainment of the balancing property in general suggested that the propensity score equation specification was very much successful in terms of balancing the distributions of covariates between the two groups of women for each treatment type. Hence, unbiased estimate of empowering effect of the wage employment and self-employment could be obtained by computing the so-called average treatment effect on the treated (ATT) for the matched women in the treated and control group. The ATT focused explicitly on the empowerment effect size of a specific treatment (wage employment or self-employment in our case) on those individuals the treatment was actually applied (wage employed or self-employment).

In order to ensure the reliability of the PSM result, three different matching estimators with replacement were used in the estimation of the empowering effect of women's wage employment and self-employment. These were the nearest neighbour matching 1 to 5-, referred to as NNM (1 to 5), radius matching with a calliper of 0.05-, referred to as Radius (.05), and kernel matching. The three matching algorithms were run with the *Psmatch2* STATA command.

**Table 8 .Impact Estimation of self-employment and wage employment on women's decision-making power**

Index	Self-employment				Wage employment			
	Treated	Control	Mean effect size (S.E)	T-stat	Treated	Control	Mean effect size e (S.E)	T-stat
	I	II	III	IV	V	VI	VII	VIII
<b>Decision-making (Asset) Index</b>								
Unmatched	0.70	0.70	0.00(0.03)	0.07	0.69	0.70	-0.01(0.04)	-0.41
NNM (1 to 5)	0.70	0.76	-0.05(0.04)	-1.49	0.68	0.78	-0.09(0.04)*	-2.10
Kernel	0.70	0.75	-0.04(0.03)	-1.32	0.68	0.78	-0.09(0.04)*	-2.10
Radius (.05)	0.706	0.76	-0.05(0.04)	-1.49	0.68	0.79	-0.10(0.05)*	-2.21

\*p<.05



Table 8 reports the standardised mean effect size, specifically the estimated ATT corresponding to the Decision-making (Asset) Index for the self-employment and wage employment treatment types. The ATT corresponding to the wage employment showed the mean effect size attained in the decision-making index among the wage employed women due to their engagement in wage employed jobs. Similarly, the ATT corresponding to the self-employment treatment type showed the mean effect size attained in the decision-making index among the self-employed women due to their being self-employed. The ATT estimates were given for both treatment types with respect to the decision-making index constructed to measure the women's decision-making power.

Accordingly, the result revealed that women's self-employment did not have a significant impact on their asset related decision-making power in households. This is particularly observed from the consistent insignificant mean effect size attained in relation to the decision-making index using the three matching algorithms considered in the analysis (see columns III and IV of Table 8). The result further showed a significant negative mean effect size for the wage employment treatment type. Accordingly, the result obtained from the different matching methods showed that wage employment significantly lowered women's decision-making power on asset-related issues with a magnitude varying by matching method from 9% to 10% (see column VII in Table 8).

#### **4. Discussion**

The results from the quantitative analysis affirm that wives' self-employment had insignificant effect on their asset-related decision-making power in households. Additionally, wives' wage employment showed negative effect on their household decision-making power. This can be explained from two perspectives, patriarchy and the nature of work, which referred to structural issues.

In relation to the patriarchal structure, as also argued in the theory of resource in cultural context (Rodman, 1972), husbands are defined as heads of the family and the ultimate decision maker in the family. The major decisions in the family are usually made by the husbands, irrespective of

women's employment status. On the one hand, women may continue to see their husbands as the "major decision makers" and accept their own subordinate positions because of years of socialization into patriarchal ideology. This could be called "internalized oppression" as used by Rowlands (1998:12). Osmani (1998:68), in this regard, also argues that "especially in those societies where women's subordination is so deeply rooted in socio-cultural norms, men's control over women is taken for granted even by [the] women themselves". On the other hand, income earning women may restrain from standing against their husbands' culturally accepted authority through open confrontation. They may rather prefer adopting what Scheyvens (1998: 237) calls "subtle strategies" which "refer to any strategies that attempt to achieve profound, positive changes in women's lives without stirring up wide-scale dissent".

The limited effect of women's self-employment on their decision-making power in households is related to the nature of the self-employed job itself its being primarily home-based work. Home-based work was not often considered as "work" among the study community. This invisibility, associated with self-employed jobs, may reproduce traditional patriarchy in rural households, and constrains the women's bargaining power in their households. Consistent with this argument, Erman *et al.* (2002), in their empirical work in Turkey, indicated that when women did handicrafts for money, they were seen as doing their "housewifely" duties, and in the patriarchal environment, the economic and social contributions of women's domestic duties remained unrecognized. Additionally, Shah (2014), in a recent work on self-employed women in Karachi, Pakistan, emphasized that women's participation in home-based income earning works had minimal effect on women's status in the society. Shah (2014: 45), in fact, presented women's home-based income earning work as an "instrument of exploitation and not of emancipation".

The negative effect of wage employment on women's decision-making power can be explained by the widely held perception of women's employment as a threat to male dominance in households among the community. This is, primarily, associated with the nature of the waged work which requires the women to go away from their villages. Many wage-

employed women during the interviews indicated that their husbands were usually teased, especially at local drink houses, by their fellow men for allowing their wives to work for wage. A husband whose wife is engaged in wage work is considered, among some men, as someone who has compromised his manhood and having no control over his wife. This situation has made the husbands remain vigilant in relation to the power dynamics in their households. The husbands often exercise ultimate control of key household decisions in order to send a message that they are indeed in control of their expected role and their dominance in their marriage is not compromised.

In view of this, the wage employed women expressed their concerns about the social pressure put on their husbands, and said they even became conscious of their behaviour more than ever in order not to create any suspicion regarding their dominance in decision-making and chastity. In cases where the women appeared to be confrontational, they quite often experienced extreme violence that might eventually end in divorce, which was socially undesirable among rural women, in particular. In this regard, Alemi, a flower farm worker from Bonde, explained:

*I know many women who were divorced because of openly questioning their husbands' authority. My husband, at least, allows me to work outside home. He could have objected it, like many other husbands. This is, at least, something. I try my level best not to give any signal of challenging my husband's legitimate authority in our relationship. I do not want to create havoc in the family.*

Although wage employed women earn income working outside home, their waged work is not the ones that grant women higher social status. This is primarily attributed to the low pay and poor working condition of most of the women's wage employment opportunities available in the area. A typical wage in flower farms in the study area ranges from 17–20 Birr (less than one USD) per day for women. In view of this, Dadhi, 60, a male key informant from Nanno Tefki, eloquently explained the little social value given to flower farm jobs saying,

*It is poverty which forced our women enter this work [flower farm]. Their earning is too small that it is not enough even to feed their children. They have no right, unlike government employees, the employers can lay them*

*off any time they want. The workers do not have leave for family events; many even don't have annual leave except a weekly one day-off.*

The data from the in-depth interviews with women working in flower farms also suggested that the women working in the NTEIs faced infringement of their labour rights. For example, the women pointed out that they were forced to work over-time (sometimes over-night) without *a priori* notice and also penalized for being absent from work to attend serious family matters, even if enough evidence was presented. The Ethiopian Labour Proclamation (FDRE 2004), in its Articles 67 and 81, states that a worker may not be compelled to work over-time and shall be entitled to a leave for family events.

Other empirical works have also attributed to the invisibility of women's work that plays a key role in maintaining women's lower status in the family and to the women's disadvantaged position in the economic structure. An ethnographic research on North India by Sharma (1980: 88), for example, stresses that the role of an Indian village woman as wage worker is only "marginal" in the family in the sense that she is likely to be paid less than men of her household and her work is certainly not regarded as "pin money".

Clearly, in the context of the poor employment setting, the economic contributions of wage employed women would not make enough of a difference in challenging the prevailing gender inequality at household level. Consistent with the arguments of Rodman's theory of resources in cultural context (Rodman 1972), this study, in general, shows the role of economic and social factors in determining the effect of women's employment on their empowerment. The above discussion, in particular, shows that the social and cultural factors still are hurdles that are at play in constraining women decision-making power in the study community, despite their economic contribution to their households. Hence, the study alludes to the importance of looking beyond economic aspects in analysing the empowering effect of women's engagement in income earning activities.

## 5. Conclusion

This paper attempted to analyse the impact of wage employment and self-employment on the empowerment at household level among currently married women by applying the PSM. It revealed that self-employment jobs had insignificant impact on women's decision-making power, the wage employed wives were found to have less decision-making power in household asset-related issues. These findings are consistent with the argument of the theory of resources in cultural context which gives due emphasis to structural factors in explaining the relationship between resources and marital power dynamics. The gender asymmetric decision-making pattern in households is so entrenched in patriarchal norms that women's access to employment is found to be ineffective in helping women to overcome it. Based on these findings, it can be argued that a myopic approach that regards improving women's access to job opportunities as a magic bullet to redress gender inequality within households and the society, at large, is particularly problematic. This approach, which implicates the family as the sole culprit in creating gender inequality and depends on market forces to equalize men's and women's bargaining power, neglects the role of a web of power structures (socio-cultural, economic, and political) in creating gender inequality in the first place. This, particularly, points to the need to design appropriate intervention mechanisms to effectively curb the counteracting force, exerted by the patriarchy and global market force (that put women in a disadvantaged position in the labour market), that disables the potential positive effect of women's participation.

### Notes

<sup>1</sup>*Woreda* is the second lowest administrative level in the country.

<sup>2</sup>Calculated from soft copy of the 2007 census data for Sabata Hawas *Woreda*.

<sup>3</sup>Own calculation from the 2007 census data for Oromia region, Part II-Educational Characteristics and Economic Activity Status (OPCC, n.d. b.: 98).

<sup>4</sup>For example, Golden Rose, the first private flower farm in the country which was established in mid 1990s, is found in Sebata Hawas *Woreda*.

<sup>5</sup>*Kebele* is the lowest administrative level in Ethiopia.

<sup>6</sup>All men

<sup>7</sup>The *pscore* STATA command was primarily used for check for the consistency of the matching quality test result obtained using the *pstest* Stata command.

<sup>8</sup>The histogram of the propensity score generated using the *psgraph* STATA command similarly indicated that the common support condition was ensured.

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**Appendix A:** Result of the logit model used for the propensity score estimation in the PSM technique (WAGE\_EMPLOYMENT dataset)

<b>Wage_Employment_treatment</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt;z</b>
Bonde	0.35	0.48	0.73	0.465
Dima_manyo	0.17	0.47	0.36	0.717
Haro_jila_Fulaso	-0.14	0.52	-0.27	0.788
Nanno_tefki	0.59	0.51	1.16	0.245
Highest_gradecompleted	0.08	0.04	1.91	0.056
Ethic_other	-0.11	0.43	-0.27	0.791
HH_wealthstatus_index	-0.26	0.06	-4.30	0.000
HOUSEHOLD_SIZE	-0.32	0.10	-3.19	0.001
member_women_org	0.62	0.33	1.90	0.057
Age_first_marriage	0.00	0.04	-0.05	0.961
age_difference	-0.04	0.03	-1.76	0.078
asset_brought_marriage	-0.31	0.52	-0.59	0.552
AGE	0.27	0.12	2.30	0.021
Age_square	0.00	0.00	-2.43	0.015
_cons	-2.11	1.81	-1.17	0.243
Number of obs.	352			
LR chi2(14)	106.02***			
Prob> chi2	0.000			
Pseudo R2	0.244			
Log likelihood	-164.01			

\*\*\*p<0.001

**Appendix B.** Results of the logit model used for the propensity score estimation in the PSM technique (SELF\_EMPLOYMENT data set)

<b>Self emp treat</b>	<b>Coef.</b>	<b>Std. Err.</b>	<b>z</b>	<b>P&gt;z</b>
Bonde	0.51	0.34	1.51	0.132
Dima_manyo	-0.64	0.43	-1.48	0.139
<b>Haro_jila_Fulaso</b>	<b>0.79</b>	<b>0.32</b>	<b>2.47</b>	<b>0.013</b>
<b>Nanno_tefki</b>	<b>0.84</b>	<b>0.40</b>	<b>2.09</b>	<b>0.037</b>
Highest_gradecompleted	0.03	0.04	0.69	0.491
Migrant	-0.03	0.26	-0.12	0.906
Return_migrant	0.30	0.55	0.55	0.583
<b>Ethic_other</b>	<b>0.63</b>	<b>0.33</b>	<b>1.88</b>	<b>0.060</b>
childhood_family_structure	0.27	0.22	1.19	0.232
Primary_educ_parent	0.19	0.27	0.69	0.493
secondabove_educ_parent	-1.48	3.68	-0.40	0.689
<b>HH_wealthstatus_index</b>	<b>-0.09</b>	<b>0.03</b>	<b>-3.19</b>	<b>0.001</b>
HOUSEHOLD_SIZE	0.04	0.08	0.51	0.609
Marriage_order	0.55	0.34	1.59	0.112
Marriage_self	0.13	0.27	0.48	0.634
Marriage_abduction	0.01	0.30	0.03	0.976
Marital_happiness_index	0.06	0.18	0.33	0.744
<b>under6_children_cat</b>	<b>0.46</b>	<b>0.27</b>	<b>1.70</b>	<b>0.089</b>
asset_brought_marriage	0.31	0.34	0.92	0.358
Age_first_marriage	-0.01	0.03	-0.26	0.795
<b>member_women_org</b>	<b>0.68</b>	<b>0.24</b>	<b>2.81</b>	<b>0.005</b>
age_difference	-0.02	0.02	-1.34	0.179
secondabove_educ_parent_age	0.08	0.15	0.57	0.568
num_living_children	0.11	0.09	1.27	0.205
<b>AGE</b>	<b>0.20</b>	<b>0.09</b>	<b>2.19</b>	<b>0.028</b>
Age_square	0.00	0.00	<b>-2.38</b>	0.017
<b>_cons</b>	<b>-4.53</b>	<b>1.60</b>	<b>-2.83</b>	<b>0.005</b>
Number of obs.		447		
LR chi2(26)		68.89***		
Prob> chi2		0.000		
Pseudo R2		0.1119		
Log likelihood		-273.51		

\*\*\*p<0.00