



## **Contribution of informal sector businesses to urban poverty reduction: the case of Wolaita Sodo Town, SNNPR, Ethiopia**

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### **Abstract**

The main objective of this study is to examine the contribution of informal sector businesses in solving unemployment and reducing poverty in Wolaita Sodo town. By using a well-structured questionnaire, data were gathered from 513 sample informal sector business operators. Both descriptive and inferential techniques were employed to analyze the data. Frequency distributions and cross-tabulations were used to see the percentage share among the background variables. Univariate and multivariate statistical techniques were also employed. The study revealed that the incomes obtained from the informal businesses enabled the operators, mainly, to meet the basic needs, to participate in social life, to create fixed assets and it also helped in creating employment opportunities. On the other hand, the result also showed that lack of working place, lack of supply market, lack of operating capital and bureaucracy to obtain work license are among the major problems the operators are facing. The analysis of the data also revealed that the life improvement of the informal sector business operators is associated with level of education, religion, age, initial capital, and profit per day, saving from income, and length of stay in the activity. The study recommended that strategies should be designed in order to enlarge access to working places, access to supply market and access to bank loan. Improving bureaucratic procedures in government rules and regulations was also recommended.

**Keywords:** informal sector, poverty reduction, unemployment, life improvement

### **1. Introduction**

#### **1.1 Background of the Study**

The "Informal Sector" has been defined in different ways by a number of authors. The concept of informal sector was introduced into international usage in 1972 by the International Labor Organization (ILO). According to the ILO 1972, informality is defined as a "way of doing things characterized by ease of entrance; reliance on indigenous resources; family ownership; small scale operations; labor intensive and adaptive technology; skills acquired outside of the formal sector; unregulated and competitive markets". Since that time, many definitions were introduced by different authors and the ILO itself. According to ILO (1993), the informal sector may be broadly characterized as consisting of units engaged in the production of goods or services with the primary objective of generating employment and incomes to the persons concerned.

Generally, the informal sector market refers to the part of the economy that does not fall under the scope of organized economic activities. Among the many different activities that are performed by the urban informal sector business operators are selling fruits, vegetables, clothes and shoes; kiosk selling various items; food operation, sales and processing; small manufacturing, production, construction and repair of goods; money changing; domestic workers; prostitution; drug peddling; small-scale artisans, barberry and shoeshine boys (ESCAP 2006; Blaauw 2005; Yuki 2007; ILO 2002; Reddy et.al. 2002) <sup>[4]</sup>.

In the majority of the SSA countries, neither the public sector nor the formal private sector is able to provide enough jobs for its expanding labour forces. Thus self-employment is increasingly the only alternative, given the growing unemployment. In absorbing the large number of

unemployed individuals in developing countries, the informal sector plays the central role and it is also useful for creating job and mitigating poverty. According to the International Labour Organization (ILO), approximately 85 percent of all new employment opportunities around the world are created in the informal economy. In sub-Saharan Africa, the share of informal sector employment varies from nearly 20 percent in Botswana to over 90 percent in Mali (Adams 2008). The share of informal sector employment is about half of employment in urban areas in many countries of Latin America, Africa and Asia (Ruffer and Knight 2007). In urban areas of Africa, the employment in informal sector is estimated to be 60 percent (ADI 2007). In addition, the informal economy in sub-Saharan Africa accounts for between 40 to 60 percent of urban employment (ILO 2002) <sup>[4]</sup>. By creating jobs and reducing unemployment, informal sector plays a vital role in urban poverty reduction (Lal and Raj 2006; Reddy et.al. 2002). Informal sector also gives a wide range of services and helps in producing a variety of basic goods used by all classes of consumers, especially by the majority of low-income earners in relatively lower price (Asmamaw 2004). Moreover, the sector is making grounds for new entrepreneurs. On top of that the sector contributes a lot in reducing urban crimes and violence (Reddy et.al. 2002) by providing employment for unemployed.

#### **1.2 Statement of the problem**

Informal Sector, according to the definition by Central Statistical Agency of Ethiopia (CSA), refers to "home based or individual establishment or 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

of 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, labor legislation and protective measures at the workplace (CSA 2003)".

By providing income and services to the social and economic development of millions of Ethiopians, the informal sector business takes a big share of its part. According to urban informal employment survey of Ethiopia, 50.6 percent of urban employments were created in the informal sector (CSA 2003).

The growth of informal sector employment is necessary for absorbing the labor force that the formal sector employment has not been able to match (UNCHS 2006). Its growth is a sign of economic success, and policies are needed to raise productivity and earnings in the sector. Understanding the informal sector employment is, therefore, crucial for the success of economic development policies and poverty reduction strategies.

Even though there are some researches in the area of informal sector businesses in relation to poverty reduction in Africa, researches in the area of informal sector are limited in Ethiopia in general and in Wolaita Sodo town in particular. Therefore, this study takes its part in assessing the contribution of informal sector businesses in solving unemployment and reducing poverty in Wolaita Sodo town.

### 1.3 Objectives

#### General objectives

The ultimate goal of this study is to examine the contribution of informal sector businesses in solving unemployment and reducing poverty in Wolaita Sodo town.

#### Specific objectives

1. Evaluating the nature of informal sector business operators
2. Identifying the problems the informal sector business operators are facing
3. Assessing life improvements of the informal sector business operators after joining the business
4. Identifying the socio-economic demographic determinants of life improvement after joining the informal sector business
5. To put forward proper strategy recommendations

#### Research Questions

This research is expected to answer the following research questions:

1. Which category or level (age, sex, educational level, residence...) is more contributing in the informal sector businesses?
2. What are the problems that the informal sector business operators are facing?
3. What kind of assistances do the informal sector business operators need so as to tackle the problems?
4. Are there any life improvements after joining the informal sector business?

### 1.4 Significance of the study

- The results of this study will be used to inform policy makers in designing appropriate interventions.
- The results of this study will also be used for assessing effectiveness of on-going policies and strategies of employment and new job creation.
- In addition, the results of this study can be used as a spring board for future academic researches.

## 2. Data and Methodology

### 2.1 Study Area

Wolaita Sodo Town is located in southern central part of Ethiopia at a distance of 390 km through Shashemene and 329km through Hossaena from Addis Ababa, Capital of Ethiopia and 167km from Hawassa, the capital city of SNNP regional state. Wolaita sodo town is one of the three reform towns in wolaita zone, which is one of the thirteen zones in SNNP region. The town is located at latitude and longitude of 6°54'N 37°45'E with an elevation between 1600 and 2100 meters above sea level.

Wolaita Sodo town is divided into three sub-towns ('kifle ketemas') and nineteen 'kebeles', the smallest political and administrative unit, with eight newly incorporated kebeles from Sodo Zuriay woreda. According to the 2007 Census conducted by central Statistics Agency (CSA) of Ethiopia, the town has total population of 76,050, of which 40,140 are men and 35,910, are women (CSA, 2007).

### 2.2 Study Population and Study Design

The aim of this study is assessing the contribution of informal sector businesses in urban poverty reduction in Wolaita Sodo town. Among the many informal sector businesses or enterprises in the study area, the following are chosen for this specific study: vegetables or fruits selling; selling clothes and shoes; cooked food, tea and coffee vending; bicycle or motor bicycle repairing; beauty work; kiosk selling various items and shoeshine work. Thus, the study population constitutes all the above mentioned seven informal sector businesses in the town. Cross-sectional study design was used to meet the specified objectives of the study.

#### Sampling Method

##### Sample Size Determination

The sample size required for this study is specified by using the following sample size determination formula:

$$n_0 = Def f \left( \frac{z_{\alpha/2}}{d} \right)^2 pq \quad (2.1)$$

Where,

- $n_0$  is the required sample size;  $Def f$  is the design effect;
- $d$  is the desired level of precision;
- $\alpha$  is level of significance; and  $p$  is estimated proportion of informal sector operators ( $q = 1 - p$ ). The Urban Employment Unemployment Survey of Ethiopia shows that about 35% of employed populations were in informal sector activity in Wolaita Sodo town (CSA, 2009). Hence, the proportion of informal sector operators ( $p = 0.35$ ) can be used.

Using the above formula the minimum required sample size with 95% confidence level, 5% precision level, 1.5  $Def f$ , and 0.35 estimated proportion is  $n_0 = 524$ . By adding 5% contingency, the final sample size becomes  $n = 550$ .

**2.3 Sampling Design**

Multistage cluster sampling method was used to identify the sample of informal sector businesses. Wolaita Sodo town is subdivided into three sub-towns (Arada, Mehal and Merkato sub-towns). The three sub-towns are used as primary sampling units (PSU), where the kebeles within the sub-towns are selected by using simple random sampling method and used as secondary sampling units (SSU). Arada sub-town has four kebeles (Dilbetigle, Selam, Hibret and Kidanemihiret), Mehal sub-town has three kebeles (Damota, Gido and Wadu) and Merkato has four kebeles (Gola, Gebeya, Kera and Fana). Using simple random sampling technique, sample of seven kebeles are selected from the three sub-towns. The selected kebeles are Dilbetigle, Selam and Hibret from Arada sub-town, Gido and Wadu from Mehal sub-town and Gebeya and Fana from Merkato sub-town. Finally, we used systematic sampling method to distribute well designed questionnaire within the selected kebeles to collect data on the informal sector operators.

The sector, in this study, is considered as informal if it satisfies the following conditions or criteria set by Central Statistics Agency (CSA) of Ethiopia:

1. If it is not registered company or cooperative
2. If it does not have full written book of account that show monthly income statement and balance sheet
3. If it does not have license; and
4. If the number of persons engaged in the activity are less than five or less

Thus, the sectors that satisfy the aforementioned four criteria are considered as informal sectors. Then, the owner of the

sector or the husband/wife of the owner was interviewed.

**2.4 The Source of Data and Methods of Data Collection**

The data sources for this study are both primary source and secondary source. That is, both primary and secondary data were collected from respective sources. The quantitative data were collected by using well designed and structured questionnaire concerning some socio-economic and demographic characteristics of the informal sector operators, socio-economic and demographic characteristics of employees in the sectors, information on the types of informal activities, the status of operators before joining the informal sectors, the problems facing the operators and future plans of the operators.

**2.5 Variables used in this study**

**Dependent Variable**

Dependent variable: Improvement in life after joining the informal sector activity.

- No improvement = 1
- Satisfactory improvement = 2
- Good improvement = 3
- Very good improvement = 4

**Independent variables**

The life improvement of informal sector operators can be determined by several socioeconomic, demographic and other variables. Independent variables like sex, level of education, religion, initial capital, saving habit, migration, age, marital status, profit per day and length of stay in the activity were used in this study.

**Table 1:** Description of independent variables in the study

Description and name	Categories	Description and name	Categories
Sex	Male Female	Migration status	Native Migrant
Level of Education	No education Primary (1 – 8) Secondary (9 – 10) Certificate and above	Age	11-20 years 21-30 years 31-42 years
Religion	Protestant Orthodox Other	Marital status	Single Married Other
Initial Capital (in ETB)	<=100 101-250 251-750 750-2500 2501-35000	Profit per day (in ETB)	<= 50 51 - 100 101 - 200 201 - 400
Saving habit	Yes No	Length of stay in the activity	<= 2 years 2 – 5 years more than 5 years

**2.6 Methods of Data Analysis**

To analyze the data, different statistical methods are used. Frequency tables, cross-tabulations and diagrams are used to characterize the sample of informal sector operators. Chi-square test of association and ordinal logistic regression are used to find the determinant factors of life improvements of informal sector operators.

**Ordinal logistic regression**

Ordinal logistic regression or (ordinal regression) is used to predict an ordinal dependent variable given one or more independent variables. There are three most commonly used

ordinal logistic regression models: the adjacent category, the continuation-ratio and the proportional odds models (Hosmer and Lemeshow 2000). However, the proportional odds model is the widely used logistic regression model for ordinal response. Thus, the proportional odds model is used in this study.

The proportional odds model compares the probability of unequal or smaller response,  $Y \leq j$ , to the probability of a large response,  $Y > j$ , that is

$$\text{logit}[\text{Pr}(Y \leq j|x)] = \log\left(\frac{\text{Pr}(Y \leq j)}{\text{Pr}(Y > j)}\right)$$

$$= \log\left(\frac{\text{Pr}(Y \leq j)}{1 - \text{Pr}(Y \leq j)}\right) = \log\left(\frac{\pi_1 + \pi_2 + \dots + \pi_j}{\pi_{j+1} + \dots + \pi_J}\right)$$

$= \beta_{0j} + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_{k-1} X_{k-1}, j = 1, 2, \dots, J - 1$   
 This is called the proportional odds model. It is based on the assumption that the effect of the covariates  $x_1, x_2, \dots, x_{p-1}$  are the same for all categories, on the logarithmic scale. Each cumulative logit has its own intercept (Agresti 2002; Dobson 2002).

**3. Results and Discussion**

**Introduction**

To assess the relationship between the response variable and the suggested independent variables, the logistic regression analysis is employed in this study. Before going to the analysis of univariate and multivariate statistics, it is better to start by briefly summarizing the cases of the data. A total of 550 informal sector operators were selected to be included in this study. Of the 550 informal sector operators, 513 were successfully interviewed, yielding a response rate of 93 percent.

**Background characteristics of the sampled informal sector operators**

In this section, we give a brief analysis of the cases of the informal sector business operators for each variable. Out of the total respondents, about 58 percent are males and 42

percent are females. This result shows that the participation of males is relatively larger than females in the sector. One of a few findings that are analogous with this is the result of the study conducted in Botswana (Kapunda and Mmolawa 2007).

The educational status of the informal sector business operators indicates that about 11% are illiterate. About 43% have primary level education and 37% have secondary level education. The remaining 9.8% of the operators have certificate and above level of education. Generally, the result indicates that great majority (about 90%) of the informal sector operators are educated. The religion status indicates that the majority (about 64%) of the operators are Protestant and 31% are Orthodox. The remaining 4.9% are other religion followers.

Regarding the age of the informal sector operators, the majority (58%) of the operators are in the range 21 – 30 years and the second majority (about 36%) of the operators are in the range 11 – 20 years. The remaining (about 6%) are in the range 31 – 42 years. This result indicates that the sector is dominated by the youth. The marital status of the operators indicates that the majority (about 71%) of the informal sector operators are single and about 28% are married. The remaining 1.6% have other marital status (widowed or divorced or separated)

The majority (about 79%) of the informal sector operators are migrants to wolaita sodo town and the remaining (about 21%) are native to wolaita sodo town. The great majority (about 94%) of the operators’ migration origin is rural and the remaining operators migrated to wolaita sodo from other urban areas. Table below gives the details of the above discussion.

**Table 2:** Background factors of sample of informal sector business operators

Characteristics		Respondents ( n = 550)	
		Number	Percent
Sex	Male	298	58.1
	Female	215	41.9
Level of education	No education	54	10.5
	Primary education (1-8)	219	42.8
	Secondary education (9-10)	190	37.0
	Certificate and above	50	9.8
Religion	Protestant	329	64.1
	Orthodox	159	31.0
	Others	25	4.9
Age (510)	11 – 20 years	184	36.1
	21 – 30 years	296	58.0
	31 – 42 years	30	5.9
Marital status	Single	363	70.8
	Married	142	27.7
	Other	8	1.6
Migration status	Native	107	20.9
	Migrant	406	79.1
Migration origin (406)	Rural	381	93.8
	Urban	25	6.2

**Types of informal sector businesses covered in the this study**

Among the many different activities that are performed by the urban informal sector business operators, this study focused only on the following seven activities. Vegetables and fruits selling constitute about 19 percent of the whole activities. Selling clothes and shoes comprises about 22

percent of the total and 21.7 percent of the operators are engaged in cooked food, tea and coffee vending activities. Bicycle or motor bike repairing and beauty work each constitute 0.6 percent. About 10 percent of the operators are engaged in kiosk selling activity. The majority (29.7 percent) of the operators are engaged in shoeshine work. The details of these are presented in table 4 below.

**Table 3:** Types of informal sector businesses in this study

Activities	Number of operators	percent
vegetables or fruit selling	95	18.5
selling clothes and shoes	110	21.4
cooked food, tea and coffee vending	102	19.9
bicycle or motor bike repairing	3	0.60
beauty work	3	0.60
kiosk selling various items	50	9.7
shoe shine work	150	29.7
Total	513	100

**Nature of Informal Sector Businesses**

**Skills acquired to apply in the job**

The majority (about 89 percent) of the operators acquired the skills to apply in the job by self-education or own effort and 6.6 percent acquired the skill from family. About 3 percent of the operators acquired the skill from training on job. The insignificant share (0.2 percent) of formal or vocational training to gain skill indicates that formal or vocational training are not necessarily required to carry out informal sector jobs. The contribution of other activities is only 0.6 percent. One of the studies that support the above results is the one by Tuncer and Enver (2004).

**Table 4:** Skill sources to apply in the activity

Skills acquired	Number of operators	percent
Self-educated	458	89.3
From family	34	6.6
On job training	17	3.3
Formal or vocational training	1	0.2
Others	3	0.6
<b>total</b>	<b>513</b>	<b>100.0</b>

**The Working days, hours and years stayed in the business**

The average number of days the informal sector operators spend on work per week is 5.68. This result corresponds to the study result by Lal and Raj (2006) which indicates that the average working days of informal sector operators is 6 days per week. This study also indicates that the average working hours per day is about 8.9 hours per day and the number of years the operators stayed in the activity is, on average, 2.63 years, which is about 32 months. The minimum and the maximum time the operators stayed in the activities range from one month to 240 months or twenty years. The mean value 2.63 years indicates that smaller observations are more frequent than larger observations, that is, the majority of the observations have a value below the average and this in turn indicates that there is a high turnover in informal activities as there is free entrance and exit in informal sector businesses.

**Table 5:** Working days, working hours and years stayed in the activity

Item	Mean	Standard error
Working days per week	5.68	0.058
Working hours per day	8.9	0.099
Years stayed in the activity	2.63	0.089

**Initial capital and daily profit of the operators**

Forty one percent of the informal sector operators started their business with an initial capital of 100 ETB or less. This indicates the ease of entrance, with respect to initial capital, into the informal sector business. About 18 percent of the operators began the business with an initial capital of 101 to

250 ETB. The majority (about 38 percent) of the operators started their business with an initial capital of 251 to 750 ETB. About 26 percent of the operators started their business had an initial capital between 751 to 2500 ETB and the remaining 10.1 percent started their business with an initial capital from 2501 to 35000 ETB. When it comes to average profit per day, it revealed from this study that 36.5 percent of the informal sector operators earn 50 or less ETB per day. The majority (about 47 percent) of the operators earn from 51 to 100 ETB per day. 13.6 percent of the operators earn from 101 to 200 ETB per day and the remaining (3.1 percent) earn from 201 to 400 ETB.

**Table 6:** Initial capital and profit per day of the informal business operators

Initial capital (in ETB)	number	percent
<=100	41	8.0
101-250	91	17.7
251-750	194	37.8
751-2500	135	26.3
2501-35000	52	10.1
Total	513	100.0
Profit per day (in ETB)	number	percent
<=50	187	36.5
51-100	240	46.8
101-200	70	13.6
201-400	16	3.1
Total	513	100.0

**Sources of Initial Capital**

Own saving or “Equb” is the major (52.8 percent) source initial capital of the informal sector operators in this study followed by borrowing from friends or relatives (22 percent). The third major (about 19 percent) source for operators’ initial capital source is assistance from friends or relatives. The share of borrowing from microfinance (1.8 percent), from pawnbroker (1.6 percent), Inheritance (0.8 percent) and others (2.1 percent) as a source of initial capital for the operators is as such significant.

**Table 7:** Sources of initial capital of the informal business operators

Source of Initial Capital	number	percent
Own saving or “Equb”	271	52.8
Borrowing from friends or relatives	113	22.0
Assistance from friends or relatives	97	18.9
Borrowing from microfinance	9	1.8
From pawnbroker	8	1.6
Inheritance	4	0.8
Others	11	2.1
Total	513	100.0

**Saving Status and Additional Income of the Operators Saving from Income**

About 83 percent of the operators reported that they save from what they earn and 11.7 percent of the operators don't save from their earning.

**Table 8:** Saving status of the informal sector business operators

Saving from income	number	percent
Yes	453	88.3
No	60	11.7
Total	513	100.0

**Additional income source**

The majority (about 83 percent) of the informal business operators don't have additional income than the one they are engaged in and only 16 percent of them reported that they have extra income sources.

**Table 9:** Additional income of the informal sector business operators

Additional income source	number	percent
Yes	86	16.0
No	422	83.1
Total	508	100.0

**Working places and reasons to work in the current location**

**Working places**

Only 1.8 percent of the informal business operators do their income generating business in their home and about 10 percent do it near their home. The percentage of the operators that do the informal business at permanent building out of the compound is also only 2.7 percent. The majority (45.4 percent) of the informal businesses are done on temporary structure and 13.5 percent of the operators do it on open spaces on street with fixed location. Nearly 23 percent of the informal businesses are done on mobile or no fixed location and the remaining (3.3 percent) are done on other places than those mentioned above.

**Table 10:** Working places of the informal business operators

Working Place	Number	Percent
At home	9	1.8
Near home	52	10.1
Permanent building out of the compound	14	2.7
Temporary structure	233	45.4
Open space on the street with fixed location	69	13.5
Mobile or no fixed location	119	23.2
Others	17	3.3
Total	513	100.0

**Reasons to work in the current location**

When a respondent was asked about the reasons to work the business in the current site or location, he or she can give more than one answer, that is, this is a type of multi coded question and that is why the total number of respondents for

this specific question is more than the sample size for the study. Accordingly, when the operators were asked about why they were operating their business in the current location, the majority (58.5 percent) of them responded that the site is near the customers or near the market and 4.7 percent responded that they chose the site because it is near the raw material. About 9 percent of the operators chose the location because it is near their residence. The second majority (51.5 percent) of the respondents were operating their business in the present location because they cannot afford other sites. Only 1.6 percent of the operators reported that they are there because the site is near their competitors and the remaining (0.8 percent) chose the site due to other reasons.

**Table 11:** Reasons to work in the current location

Reasons to Work in the Current Location	Number	Percent
Near to customers/market	300	58.5
Near to raw material	24	4.7
Near to owner's residence	45	8.8
Cannot afford other sites	264	51.5
Near competitors	8	1.6
Others	4	0.8
Total	645	125.9

**Problems Facing the Informal Sector Operators**

As can be seen from the following table, the major problems the informal business operators are facing while operating the business are lack of working places (42.5 percent), lack of market (21.6 percent), lack of operating capital (17.3 percent) and bureaucracy to obtain license (26.7 percent).

**Table 12:** Problems facing the informal sector business operators

Problems faced while operating the business	Number	Percent
Lack of working place	218	42.5
Problems with workers	3	0.6
Lack raw material	22	4.3
Lack of supply market	111	21.6
Lack of skill	8	1.6
Lack of operating capital	89	17.3
Family responsibility	34	6.6
Social responsibility	31	6.0
Credit to friends/relatives	12	2.3
Bureaucracy to obtain work license	137	26.7
Health problem	2	0.4
Culture influence	7	1.4
Lack of transparency in rules	1	0.2
Others	6	1.2
Total	681	132.7

**Assistance Needed from the Government**

Some of the assistances the informal business operators need from the government are rated in the following table. The major ones are: rights of property and work (55.8 percent), access to supply market (30.8 percent), and access to working place (27.9 percent).

**Table 13:** Assistance needed from the government

Assistance needed from government	Number	percent
Access to working place	143	27.9
Access to rental building	27	5.3
Access to supply market	158	30.8
Access to bank loan	36	7.0

Favorable government rules and regulations	24	4.7
Rights of property and work	286	55.8
Better supply of raw materials	20	3.9
Access to technical training	1	0.2
Accounting or business training	51	9.9
Others	2	0.4
Total	748	145.9

**Improvements in life among informal sector operators since joining the activity**

The improvement in life since joining the informal sector business was categorized into four as very good, good, satisfactory and no improvements. Thus, the amount of operators who reported a very good improvement is about 32 percent and those who achieved good satisfaction in their business amount 40.2 percent. About 22 percent got satisfactory improvement and the remaining (5.8 percent) got no improvement in their life.

**Type of Improvement in Life**

According to the results on type of improvements in life, majority (about 87 percent) of the respondents reported that the type of improvement they got is meeting basic needs. The other improvements in life the next majority of respondents reported are participating in social life (28.3 percent), being free from unemployment (20.8 percent) and creating fixed asset (17.2 percent).

**Table 14:** Improvements in life of the operators since joining the sector

Improvement in life	Number	Percent
Meeting basic needs	447	87.1
Helping family	47	9.2
Continuing education	36	7.0
Participating in social life	145	28.3
Free from unemployment	105	20.8
Creating fixed asset	88	17.2
Other	2	0.4
Total	870	170.0

**Informal sector operators by selected socioeconomic and demographic characteristics and improvement in life after starting the business**

The chi-square test of association and the cross tabulation result of the selected variables with the life improvements of the informal sector operators are presented in the following table. As can be seen from the table, level of education, religion and age are found to be significantly associated with the dependant variable.

**Table 15:** Percentage distribution of the operators by selected variables and improvement in life since joining the activity

Characteristics	Improvement in life since joining the activity				Total	Chi-square
	Very good	Good	Satisfactory	No		
<b>Sex</b>					<b>513</b>	<b>0.460</b>
Male	94	115	68	21	298	
Female	71	91	44	9	215	
<b>Level of education</b>					<b>513</b>	<b>0.001</b>
No education	12	22	15	5	54	
Primary (1 - 8)	54	98	57	10	219	
Secondary (9 - 10)	84	68	26	12	190	
Certificate and above	15	18	14	3	50	
<b>Religion</b>					<b>513</b>	<b>0.025</b>
Protestant	119	124	63	23	329	
Orthodox	41	72	39	7	159	
Others	5	10	10	0	25	
<b>Age</b>					<b>510</b>	<b>0.040</b>
11 - 20	67	72	32	13	184	
21 - 30	90	116	76	14	296	
31 - 42	5	18	4	3	30	
<b>Marital status</b>					<b>513</b>	<b>0.521</b>
Single	116	144	82	21	363	
Married	49	58	27	8	142	
Others	0	4	3	1	8	
<b>Migration status</b>					<b>513</b>	<b>0.143</b>
Native	42	33	26	6	107	
Migrant	123	173	86	24	406	
<b>Migration origin</b>					<b>406</b>	<b>0.415</b>
Urban	9	12	2	2	25	
Rural	114	161	84	22	381	

**Informal Sector Operators by Selected Variables and Improvements in Life since Joining the Business**

All the variables presented in the table below, namely, main job, initial capital, profit per day, saving from income and

length of stay in the activity are significantly associated with the dependant variable. In addition, the following table presents the cross tabulation of the selected variables with improvement in life of the informal sector operators.

**Table 16:** Percentage distribution of the operators by selected variables and improvement in life after joining the activity

Characteristics	Improvements in life since joining the activity				Total	Chi-square
	Very good	Good	Satisfactory	No		
<b>Main job</b>					<b>513</b>	<b>0.005</b>
Vegetables or fruits selling	28	39	22	6	95	
Selling clothes or shoes	48	43	14	5	110	
Cooked food, tea and coffee vending	38	46	16	2	102	
bicycle or motor bicycle repairing	2	0	1	0	3	
Beauty work	0	1	2	0	3	
Kiosk selling various items	7	25	15	3	50	
Shoeshine work	42	52	42	14	150	
<b>Initial capital</b>					<b>513</b>	<b>0.007</b>
<=100	18	16	1	6	41	
101 - 250	30	37	22	2	91	
251 - 750	60	72	48	14	194	
751 - 2500	35	64	32	4	135	
2501 - 35000	22	17	9	4	52	
<b>Profit per day(in ETB)</b>					<b>513</b>	<b>0.002</b>
<=50	62	63	44	18	187	
51 - 100	85	93	52	10	240	
101 - 200	17	37	14	2	70	
201 - 400	1	13	2	0	16	
<b>Saving from income</b>					<b>513</b>	<b>0.000</b>
Yes	165	191	78	19	453	
No	0	15	34	11	60	
<b>Length of stay in the activity</b>					<b>513</b>	<b>0.000</b>
<= 2 years	53	100	67	20	240	
2 – 5 years	99	90	35	8	232	
Greater than years	13	16	10	2	41	

**Determinants of Life Improvements of Informal Sector Operators**

In the following section, detailed discussion and interpretation of variables involved in multivariate analysis are given based on the results of table 17 below.

The odds ratio (1.23) for sex variable implies that the odds of getting better improvement in life are 1.23 times large for male operators than for females, when the other variables in the model are held constant. This result is expected in a country like Ethiopia where males dominate in activities such as shoeshine work, selling clothes and shoes, bicycle or motor bicycle repairing.

The odds of getting better improvement in life are 1.23 times greater for operators who have secondary level education than for those who have certificate and above level of education. But, the odds of getting better improvement in life are 0.43 percent and 0.17 percent less for operators with no education and primary level of education, respectively, than those operators having certificate and above level of education. Thus, operators with higher level of education are more likely to have better improvement in life than operators with lower level of education. Education is relevant to the modern world of work in which problem solving and flexibility are required to go with changing technologies and so as to tackle market competition (Simon et.al. 1994).

The odds ratio (9.07) for the variable saving status in the output table indicates that operators who save from what they earn enjoy better improvement in life more than 9 times than those who don't have saving habit. This result matches with the general truth that every business operator who has better saving habit enjoys better life improvement. Saving helps people to plan for future expense, cope up with stochastic crises and cover unanticipated expenses (Bamlaku 2006).

Operators who are native to the town enjoy better life improvement about 1.4 times than those who migrated to the

town. This might be because of the reason that if a person is native to a place where he operates some business, he can cope up with any difficulties easily and may perform better than the one who is migrant.

The odds ratio values (1.29) and (1.09) for the age variable indicate that the younger informal sector operators, 11 – 20 and 21 – 30 years respectively, get 1.29 and 1.09 times better life improvement than the older ones, 31 – 42 years. This result might be supported by the current situation in Ethiopia where the youth are transforming from unemployment to employment and as a result the younger age group may enjoy better life improvement.

The odds ratio values (2.75), (2.59), and (1.93) for the average profit per day variable categories <= 50 ETB, 51 – 100 ETB, and 101 – 200 ETB, respectively, indicate the opposing result with reality on the ground, that is, the informal sector operators in the aforementioned profit categories enjoy better life improvements than those operators earning higher profit per day, 201 – 400 ETB. It is not surprising to see such a result because, as it can be seen in data collection phase, almost all the informal sector operators were hesitating to tell the correct profit they get from their business so as not to be exposed to tax offices and as a result they reported it in a way that puts only their saving on the safe side.

The values (0.47) and (1.10) of odds ratio for the variable length of stay is interpreted as: the improvement in life of the operators who have stayed in the business for two years and less have got 53% less improvement but those who stayed in the business for two to five years showed better life improvement when compared to those operators in the reference category. This may be attributed to the analyses that operators may face some challenges while joining the business and hence may not see life improvements until they gain experiences of the natures of different conditions.



The odds ratio values in table 17 for the variable main job indicates that except one activity, beauty work, all the other activities provide better improvement in the lives of the

operators when compared the activity in the reference category.

**Table 17:** Results of logistic regression analysis

Variable	$\hat{\beta}$	Odds ratio	S.E.( $\hat{\beta}$ )	95% Confidence Interval	
				Lower Bound	Upper Bound
<b>Sex</b>					
Male	0.20	1.23	0.34	-0.46	0.87
Female(ref)					
<b>Level of Education</b>					
No education	-0.53	0.57	0.40	-1.31	0.25
Primary (1-8)	-0.19	0.83	0.32	-0.81	0.43
Secondary (9-10)	0.21	1.23	0.32	-0.41	0.83
<b>Certificate and above (ref)</b>					
Religion					
Protestant	0.66	1.93	0.41	-0.15	1.46
Orthodox	0.36	1.44	0.42	-0.46	1.18
Others (ref)					
<b>Initial Capital (in ETB)</b>					
<= 100	1.01	2.74**	0.50	0.04	1.98
101 – 250	0.82	2.27*	0.42	-0.00	1.64
251 - 750	0.22	1.24	0.36	-0.49	0.92
751 – 2500	-0.09	0.91	0.33	-0.74	0.55
2501 – 35000 (ref)					
<b>Saving Status</b>					
Yes	2.21	9.07***	0.30	1.62	2.79
No (ref)					
<b>Migration Status</b>					
Native	0.34	1.41	0.22	-0.10	0.78
Migrant (ref)					
<b>Age</b>					
11 – 20	0.25	1.29	0.48	-0.68	1.18
21 – 30	0.08	1.09	0.42	-0.74	0.91
31 – 42 (ref)					
<b>Marital Status</b>					
Single	0.67	1.94	0.74	-0.79	2.12
Married	0.93	2.55	0.72	-0.47	2.34
Others (ref)					
<b>Profit per day (in ETB)</b>					
<= 50	1.01	2.75*	0.53	-0.03	2.06
51 – 100	0.95	2.59*	0.51	-0.06	1.96
101 – 200	0.66	1.93	0.54	-0.40	1.71
200 – 400 (ref)					
<b>Length of stay in the activity</b>					
<= 2 years	-0.77	0.47**	0.38	-1.50	-0.03
2 – 5 years	0.10	1.10	0.36	-0.61	0.80
more than 5 years (ref)					
<b>Main Job</b>					
Vegetables and fruits selling	0.18	1.20	0.39	-0.58	0.94
Selling clothes and shoes	1.28	3.60***	0.33	0.63	1.93
Cooked food, tea and coffee vending	1.02	2.76**	0.41	0.20	1.83
Bicycle or motor bicycle repairing	1.92	6.80	1.22	-0.47	4.30
Beauty work	-1.19	0.31	1.13	-3.40	1.02
Kiosk selling various items	0.29	1.34	0.34	-0.38	0.97
Shoeshine work (ref)					
LR chi2 (27)	155.314				
Prob > chi2	0.000				

\*\*\*Significant at 1%; \*\*Significant at 5%; \*Significant at 10%; ref indicates reference category; unmarked ones indicate insignificant variables; the significant LR statistics (Prob>chi2=0.000) indicates that the overall model is significant.

## 4. Conclusion and Recommendations

### 4.1 Conclusion

The informal sector market refers to the part of the economy that does not fall under the scope of organized economic activities. Among the many different activities that are performed, in Wolaita Sodo town, by the urban informal

sector business operators, this study focused on the following activities: vegetables or fruits selling; selling clothes and shoes; cooked food, tea and coffee vending; bicycle or motor bicycle repairing; beauty work; kiosk selling various items and shoeshine work.

According to the sample result, the male operators have a

slight dominance in number and the majority of the operators completed at least primary education. The sample result also showed youth dominance in the sector and in the same way it showed that the majority of the operators are single. Most of the operators of the business are not native to the town. As the sample result showed, almost all the operators began their business with an initial capital less than or equal to 2500 ETB and the major sources of it were reported to be own saving or "equib", borrowing from friends or relatives and, assistance from friends or relatives. Majority of the operators reported that they save from what they earn but because of the fear of tax issues and other related reasons, as can be observed during the data collection and supervision phases, they minimize the profit they get.

The operators also reported that almost all the skills needed to apply in the job are acquired from self-education and some from family. That is, neither the formal or the vocational training nor the other trainings has been applied to gain any skill. However, the operators mentioned the assistances they need from the government and accordingly, the major ones they pointed out are: access to working places, access to supply market, rights of property and work, access to bank loan, and accounting or business training.

The major problems the operators are facing while operating their business are lack of working places, bureaucracy to obtain work license, lack of supply market and lack of operating capital. Nevertheless, majority of the operators achieved good improvement in their lives followed by very good and satisfactory improvements. Among the major improvements in life the operators got are meeting basic needs, participating in social life, being free from unemployment and creating fixed asset.

#### 4.2 Recommendations

The following recommendations are given on the basis of the findings of this study:

Lack of working place is the number one problem the informal sector operators are facing while operating their business. Therefore, access to working places should be enlarged for the operators.

Bureaucracy to obtain license, lack of supply market, and lack of operating capital are among the other problems the operators are facing while operating the business. Thus, to the extent possible, strategies should be designed in a way that can solve these problems. Correspondingly, access to working place, access to supply market, access to bank loan, and rights of property and work are among the assistances needed by the operators from the government.

It has been reported that the operators with saving habit compared to those do not save achieved a very significant life improvement and also those operators with better education or training showed better improvements in their lives; therefore, access to education and business trainings should be encouraged.

Finally, we further recommend similar studies in other wolaita sodo university catchment towns.

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