The Role of Female’s Participation in Economic Activity to Household Income The Case of Mizan Aman Town, South Nation Nationality And People’s Region, Ethiopia

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Research Article

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Abstract

The main aim of the study was to examine the role of females' economic participation in household income. To achieve this objective both primary and secondary sources of data were collected from 400 sample size using simple random sampling method. The obtained data were first analyzed using a descriptive method to describe socio-economic characteristics of women in the study area. Secondly, to identify determinants of women's participation in economic activities and household decision-making process logit model was employed and finally, multiple linear regression method was applied to identify factors affecting the level of women's contribution to household income. The result shows that female participation in economic activities positively determines by women's training and woman's education level and is negatively affected by the presence of children under five years of age. The contribution of women to household income on average was estimated birr 32,400.50 per annum which was nearly 36.8 percent of the overall household income. The possible recommendation is government and other respective bodies must encourage women to learn more and more.

1. Introduction

1.1. Background of the study

Females are more than half of the global population. They are the mothers of the remaining half. As mothers and as producers and agriculturalists, the work of women helps their youngsters and societies. However, all over the world, the poorest individuals are mostly women and their dependent children. Women face a collective level of violence due to their gender and half a million pass away every year as a direct or indirect consequence of pregnancy (Ancy, 2004).

Females represent comparably a large cluster because of the workforce in several economic activities. Consequently, economic transformation is not possible while not the involvement of females. Yet, today, Ethiopian ladies have not been able to equally use the country's wealth due to the cause their labor and their participation in economic activity have not been appropriately valued (ILO, 2007).

Women's involvement in economic activities overall and agriculture in specific has remained low. Nevertheless, the current labor force survey conducted by the central statistical agency displayed quickly increased involvement of women in economic activities., the portion of women labor force involvement was 77 percent in 2017, related to 88 % for men—together above the SSA average. The ratio of females to males involved in the labor force increased radically in the early 2000s (ILO, 2017). The improvement is supported by poorness, empowerment of women by NGOs, and migration of male members from agriculture to non-farm occupation. With the absence of male members, women's role is shifting from unpaid family employees to farm managers, a phenomenon termed as “feminization of agriculture.

Nowadays, we have a high proportion of, female entrepreneurs, ministers, judges, and others. We have similarly a growing rate of female university graduates in the world. The integration of women into the labor force has meant less dependent on men, as a result of that these women can take over jobs, there is
less dependence. The combination of females has also extended the intelligent pool in social, economic, and political discussions in Ethiopia (Ancy, 2004).

They play a major role in seed production, farming, fisheries, post-harvest management, business management, conservation of biological diversity, management of energy and family (Jaspa, 2008). Regardless of their unbelievable contribution to food production and well-being for the household, women’s contribution remains unrecognized or less recognized. This attracts the researcher to study women’s contribution to household income that helps to point out clearly a whole image for women’s effort.

1.2 Statement of the problem

Females have played a three-way role in society. That is, having a reproductive role, a productive role, and participating in economic activity can help to alleviate poverty (Todaro and Smith, 2009).

Female’s contribution to economic activity has become more and more important for encouraging growth, stimulating potency, food security, and serving future generations. Females, like males have been actively engaged in productive and many community affairs, but their contribution remains invisible and unrecognized and also the generation of household wealth and national wealth is not recognized. However, the information above in the attainment of these plans remains solely partial and disputable (World Bank, 2007).

According to the ministry of finance and economic development, (MOFED) (2019) and the central statistical authority, the total population of Ethiopia is around 115 million and from this, 49.6% are female. Once we understand their age character, age greater than 15 is 58%. Thus, female represent proportionately a large group as the labor in numerous economic activities. Therefore, economic development is unlikely without the participation of females. However, nowadays Ethiopian females have not been equally advantageous from the state’s prosperity and their labor in addition to the participation in economic activity has not been correctly valued.

Women typically face isolation and elimination supported by the socio-cultural norms of the social system that eventually limit their entree to development and authorization (Isran, 2012). Presence deprived of the essential legal rights of involvement in economic activities, the constraint on work outside the house, absence of education and skills, wrong understandings and applications of withdrawal, and therefore the honor related with the women’s sex, domestic workloads, and the lack of awareness regarding the market creates them dependent on their male counterparts (Butt et al, 2010). As a result, the males received kindness in all aspects of life for a higher opportunity such as food, education, ownership, higher cognitive process, and the power of the resources (Pudup, 1990). In Ethiopia, women are frequently involved in free and unrecognized activities, causing them to be the most deprived of compensation while less recognition (Arshad et al., 2008). As a result, the marginalization of these women from the development process has resulted in the loss of huge productive potential.
As per a result of such attitudes, traditional dogmas in Ethiopia hold that the suitable role of females is limited to maternity and management of the home. In line for such attitudes and perceptions, Ethiopian females have neglected from various economic activities and therefore the impact of participation is not accurately valued.

In addition to performing valuable agricultural tasks, these women are mostly kept busy in free domestic responsibilities, and their efforts stay neglected and invisible in development policies. These women are mostly ignored, unseen, unvoiced, and unappreciated in the development plans, which results in a potentially large unused economic contribution. This encourages the researcher to carry out this study.

Even though several studies on woman's employment and poverty have been conducted, as far as the researcher's awareness, there has been no study on women's participation in economic activity. As an example Kabeer and Mahmud (2004) assessed the relationship between globalization, woman's employment and poverty in Bangladesh. They discovered the knowledge of a woman's employment in the garment factory, which is rapidly increasing as a result of economic growth associated with household poverty reduction; however, they failed to notice decisive proof on what proportion do they contribute to considerably scale back the poverty.

Similarly, Mesfin (2012) studied the determinants of female unemployment in Ethiopia. However; he failed to takes into account the impact of women's participation within the proletariat on a country household income. Mulugeta (2021) investigated the determinants and role of female's economic participation for household poverty reduction in Debre Birhan town, North Shewa zone, Ethiopia. Ayferam (2015) investigates the roles and constraints of Women in Economic Development of Ethiopia: The case of Ambo town. Tegegne (2012) assessed the role of women in agriculture in southern nation nationality people's region: the case of halaba special woreda, Ethiopia. However, the role of female participation in economic activity to household income so far was not well assessed. Now this study was carried out to investigate the relationship between females' participation in economic activity and household income. The findings can be used to design the relevant program and strategy for encouraging women's labor force participation in economic activity in the study area.

1.3 Research Questions

The study would mainly concentrate on the fundamental research question therefore; the investigation would address the subsequent research questions

1. What is the main area of economic activities women are highly engaged in?
2. What factors determine women's participation in economic activities?
3. What factors affecting the level of women's contribution to household income?
4. What is the impact of women's income on household decision-making?

1.4. Objective
1.4.1 General objectives

The general objective of the study is to examine the role of female's participation in economic activities the case of Mizan Aman town.

1.4.2 Specific objectives

- To assess the main area of economic activities women are highly engaged in
- To analyze the determinants of women's participation in economic activities
- To identify factors affecting the level of women's contribution to household income
- To determine the impact of women's income on household decision-making.

2. Literature Reviews

2.1. THEORETICAL LITERATURE REVIEW

Females play three roles in economic development in most low-income developing countries' households. Female roles embody labor force reproduction, productive work, and community managing work. In rural areas, their productive role usually takes the informal sector and small enterprises located either within the home or neighborhoods. Female community management work entails the provision of items for collective consumption undertaken in the local community in both urban and rural contexts (Moser, 2000).

During the 1970s, the academic literature moved away from studying females in the family, towards investigating their activities outside the domestic setting and investigating their economic relations. Moreover, scholars have deal with the problem of females at different times on various matters. A number of them highlighted the equality and other inequality or male and female contribution to the economy of the nation. Although societies still believe in the superiority of males due to this for a decade the role of the female in many aspects is not an issue.

An important contribution to the national economy Ethiopian women has played a standard role of mother and housewife in both rural and urban areas of Ethiopia. Their works, however, have never been restricted to the households and also the family. Females' productivity is predominant in the processing and marketing of food and related cottage industries (Tanru and Cheru, 2006).

Agreeing to the formal sector study done by the ministry of labor and social affairs in 1989 the number of males employed both in public and private sectors was employment opportunities are limited, was about 82.1 percent of the total labor force, whereas females represent only 17.9 percent. According to related source information showed that among those workers who have been employed through the ministry of labor and social affairs the civil services commissions, the number of females is far lower. That, of course, is a good inductor of the urgency and the seriousness of the situation of Ethiopian females.

Female entrepreneurs make up a small percentage of the business world. The majority of the female are
engaged in the service sector as bar, grocery, and restaurant owners because they lack the appropriate skill and capital.

These entire facts signal advice situation in welfare terms, any deliberate measure that inhibits female's access to income and resources likely to have precipitate effects, most certainly on nutrition. The information gathered about females in Africa, in general, is not only a list of factors and an account of success or failure but also a collection of information to support of asset of complementary ideas. Development policies that file to address female current economic activities contribution are running counter to the current concerning female's participation, and are potentially setting up serious tipple effects in children welfare, fertility and the poor use of development research female's interest potentially furthered when rural employment and strengthen regional diversity. Policies that support and promote female activities have to be part of a broad development strategy (Guyer, 2007).

2.2. Empirical Review

Women are more likely to work in inferior jobs, be underemployed, work part-time and long hours for low pay, be involved in engaging in dangerous work, or have only short-term and/or informal employment arrangements. Women's inefficient employment situations of women have resulted in household impoverishment and fall to fostering economic growth (ILO, 2016).

In the world, over 4.5 billion of the population are engaged in numerous economic activities among those women's are estimated as 1.5 billion; in addition to this women make up 40% of the world workforce in agriculture, Quarter in trade, and third in service. This participation added to extend the output 20% in Africa, 50% in developed nations (Matandare, 2018).

Throughout Asia, women make a significant contribution to the overall economy in agriculture in Bangladesh, Bhutan, Cambodia, China, India, Myanmar, Nepal, Pakistan, and Vietnam have particularly high percentages of female's agricultural workers, with estimates ranging between 60 and 98 percent (FAO, 2003). Among the Asian countries, only 59 percent of Bangladeshi females work in agriculture, compared to over 74 percent of Indian, 64 percent Pakistani, and 85 percent Nepali women are employed in agriculture.

Roy et al (2017) investigated the contribution of women to household income and decision making in a few areas of Mymensingh in Bangladesh. Women in the study area were involved in various income-generating activities such as crop production, post-harvest activities, poultry rearing, management of livestock and fisheries, etc. Male and female workers participated in income-generating activities for 220 man-days and 204 man-days per annum, respectively. The average annual contribution of women to household income was estimated at Tk. 42000 per year which was about 43.52 percent of the total household income. The investigation showed that females' income was absolutely related to women's education and farm size but negatively associated with age, family size, and indebtedness. Logistic regression analysis showed that women's participation in the decision-making process was negatively connected with family size, however positively correlated with respondent's age, education, farm size,
income, and occupation. Women rendered a wonderful deal of contribution in deciding on post-harvest operation, management of production activities, marketing of crops, rearing poultry, goat, and cows, buying of agricultural inputs, etc.

Chowdhury et al. (2009) found that women are vital partners in the socioeconomic change of the country in general and thus the family in specially. They can contribute considerably to the socio-economic improvement of the family if a good environment with facilities can be ensured.

By tradition, women have traditionally been involved in productive, reproductive, and participatory roles. Several studies show that women do concerning 50-60% of the agricultural work in farming households. Women are the backbone of any society and are dynamic in the micro and informal sector, which are given little consideration. Their contribution is neither worth nor reported Because of the deep-rooted socio-cultural practices and their low education status; women have restricted access to an economic resource like land, property, credit, financial services, and so on and are usually engaged in informal activities (Haddas, 2001).

According to Wondimu (2013), females in Ambo town in the federal democratic republic of Ethiopia play an important role in the town's economic development from the three perspectives. These are saving roles, correct use or utilization of resources, and family planning role. Women have an excellent role in saving what they earn both in kind and in cash. They are active members of a traditional saving institution such as Equib, Edir, and others. during this case, women are not only the active participants in these traditional saving institutions but also play a crucial role in leading, coordinating, managing, and organizing these traditional saving institutions.

3. Research Methodology

3.1. Target population

According to Mizan –Aman town finance office report total population are 99984. Out of them, 52532 are male and 47452 are female. The sample for this study was drawn from the total population of women (47452).

3.2. Types and Source of Data

Both secondary and primary data sources were used. The Primary data gathered through a personal interview, observation, structured and unstructured questionnaires, and Secondary data for the study obtained from reviewing written documents, both published and unpublished,

3.3. Sampling Techniques

There are many methods used to select samples from the target population out them. In this study probability or lottery method of sampling technique of simple random sampling was employed. Why because it is simple to take a sample from the town through random sampling since they are
homogeneous in terms of production season and temperate zone so the researcher believes that the
target residents shares at least one mutual characteristic.

The researcher used a simple random sampling method to determine sample sizes. Out of the target
population of 47452 of the study area, 400 sample sizes were randomly selected from the target
population of the area. The sample size estimated using the well-known and simplified formula provided
by Yamane, (1967) that was used to determine the required sample size at 95% confidence level and 5%
level of precision error.

\[
N = 47452 \quad e = 0.05
\]

\[
n = \frac{N}{1 + N(e)^2}
\]

\[
n = \text{sample size} \quad \frac{47452}{1 + 47452 (0.05)^2} = \frac{47452}{119.63} = 399.98 \approx 400
\]

\[N = \text{target population} \quad n = 400 \text{ samples were selected to represent total female population}
\]
in the district

3.5 Method of data analysis

To achieve the study's objective, the descriptive method was used to describe the socio-economic
characteristics. The econometrics method of analysis was carried out to focus on the factors that
influenced the level of women's contribution to family income and decision-making. Annual income was
defined as the total earning of the respondent and other members of the family from agricultural and
non-agricultural sources during a year. Factors affecting women's contribution to household income was
estimated by using multiple linear regression models in the following equation:

\[
Y = \sum_{i=1}^{n} A_i + \sum_{i=1}^{n} B_i
\]

An attempt was made to explore the determinants of yearly income by using a multiple regression model
that can be seen from the following equation:

\[
\ln Y = a + B_1 X_1 + B_2 X_2 + B_3 X_3 + B_4 X_4 + B_5 X_5 + U_i
\]

Where, \(Y = \) Women's contribution to household income (bir.); \(X_1 = \) training; \(X_2 = \) Education; \(X_3 = \) pregnancy
(s); \(X_4 = \) work experience (No); \(X_6 = \) household income (birr./year); and \(U_i = \) Stochastic/error/random term

The second Logit model was estimated using a binary dependent variable. The binary variable was
assigned the value 1 for a decision that was taken by women alone and zero otherwise. As well as
participation economic activities assigned 1 for those who participated and zero otherwise. The logit model has been specified as follows:

\[ y_i = \frac{1}{1 + e^{-\sum_{i=1}^{n} z_i}} = \sum_{i=1}^{n} \beta_0 + \beta_{txi} + u \]

\[ Y_i = B_0 + B_1X_1 + B_2X_2 + B_3X_3 + B_4X_4 + B_5X_5 + U_i \ldots \cdot i \]

\[ Yi = e^{\sum_{i=1}^{n} \beta_0 + \beta_{txi} + e} \]

\[ odd = \frac{yi}{1-yi} = ln\frac{yi}{1-yi} = ln\sum_{i=1}^{n} z_i = zi \]

Here, Yi = A binary variable having 1 for scoring above 400 percent of household decisions taken by women alone and 0 otherwise, \( X_1 \ldots X_n \) is the explanatory variable and \( U_i \) = Error term.

, a 5-point Likert Scale was used for measuring the opinions of the respondents about the household decision-making process, all of which were favorable judgments on a five-point scale. There were 10 statements including only the favor judgments against the 5-point scale. Each respondent was asked to indicate her extent of judgment against each statement along a 5-point scale, i.e., 'strongly agree', 'agree', 'neutral', 'disagree', and 'strongly disagree'. Weights assigned to these responses were 5, 4, 3, 2, and 1 in favor and 1, 2, 3, 4, and 5 in disfavor. The total score of a respondent was estimated by summing up the weights for answers against all the 10 indicators. Women's contribution to income was measured while asking their opinions about many decisions. The total score of a respondent was calculated by adding up the weights for responses against all the 10 statements. Perception score for each respondent was calculated by using Perception Index (Roy, 2009) (that could range from 10 to 400) by using the following formula: Perception index (PI) = 5×SA + 4×A + 3×N + 2× DA + 1×SDA (in favor).

4. Result And Discussion

4.1. Respondent Socio-economic characteristics

According to Table 1 only 19.04 percent of female-headed households were found to be in the labor force, while 90.96% of male-headed households were in the labor force. From the total number of female-headed respondents contained within the sample, 33.33% are not participating; from a comparable figure for male-headed households were only 34.06%, respectively. The chi-square test displays that there is a sufficient relationship between the sex of the head of the household and their participation, which is confirmed by the \( X_2 = 37.897 \) and \( P = 0.00 \).
If we look at an aspect of sampled households educational achievement about their participation, the result shows that from sampled females 33.5%, 33.25%, 8.25%, 15.5% and 9.50% of them don't have formal education, attained primary school, secondary school, TVET/college, and university and above education, respectively.

Table 1
socio-economic characteristics of the respondent

| Participant | Not participate | Total | \(X^2\) & p value |
|-------------|----------------|-------|-------------------|
| Age         | Number | Percent | Number | Percent | Number | Percent |       |
| Less than 20| -      | -       | 7      | 1.75     | 7      | 1.75     | 37.897 | 0.000 |
| 21-25       | 24     | 23.87   | 64     | 76.13    | 88     | 22.25    |
| 26-30       | 37     | 55.56   | 26     | 44.44    | 63     | 16       |
| 31-35       | 49     | 61.03   | 28     | 38.97    | 77     | 19       |
| Greater than 35| 154   | 91.52   | 11     | 8.48     | 165    | 41       |
| Total       | 264    | 66      | 136    | 34       | 400    | 100%     |
| Sex of head |         |         |        |          |        |          | 17.438 | 0.000 |
| Male headed | 240    | 65.94   | 124    | 34.06    | 364    | 90.96    |
| Female headed| 24    | 66.67   | 12     | 33.33    | 36     | 19.04    |
| Education level |   |         |        |          |        |          | 46.94  | 0.000 |
| Illiterate  | 46     | 34.59   | 87     | 65.31    | 134    | 33.5     |
| Primary education | 99  | 73.88   | 35     | 26.12    | 133    | 33.25    |
| Secondary education | 25 | 75.76   | 8      | 24.24    | 33     | 8.25     |
| TVET        | 55     | 91.67   | 5      | 8.33     | 60     | 15.5     |
| Degree and above | 39 | 97.5    | 1      | 2.5      | 40     | 9.50     |
| Total       | 264    | (66)    | 136    | 34       | 400    | 100%     |

Source: own computation 2021

4.2 The main area of economic activities women are highly engaged in

Because the area of the study was conducted in the town the women are more likely to participate in business and business-related activities. (Table 2) below shows that 27.27 percent of females work as government employees as their main occupation and 21.97 percent of women participate in business as
a merchant. In the study area, business service, labor selling, and other activities were found to be important sources of household income.

4.3. Distribution of annual income earned by respondents and other family members on average

The average annual incomes of the households were estimated ETB. 88,044.50. among this it is seen from (Table 3) that the total percentage of women's contribution to household income is 36.8 percent where the total male percentage is (ETB 46,122) 52.38 percent. The table shows that women's contribution to household income was ET birr. 32,400.5 And the respondent confirm that pattern of women's contribution to household income has been increased than before. Therefore women contribute a lot to their household consumption and it is evidence they vital in the economy.

| Types of Occupation mainly women engaged | Number | Percent |
|------------------------------------------|--------|---------|
| Government employee                      | 72     | 27.27   |
| Merchant                                 | 58     | 21.97   |
| Working in Hotel and small café          | 45     | 17.04   |
| Homeworker (Washing cloth, cooking food) | 34     | 12.88   |
| Selling tea and coffee                   | 20     | 7.58    |
| Daily laborer                            | 18     | 6.82    |
| Other                                    | 17     | 6.44    |
| Total                                    | 264    | 100     |

Source own computation 2021

| Respondent/Family members | Amount (bir.) | percentage of contribution |
|---------------------------|---------------|-----------------------------|
| Wife                      | 32,400.50     | 36.8                        |
| Husband                   | 46,122.35     | 52.38                       |
| Other female members      | 4600.90       | 5.22                        |
| Other male members        | 4920.75       | 5.60                        |
| Total annual household income | 88,044.50  | 100.00                      |

Source own computation 2021
4.4. The determinants of women’s participation in economic activities

14 explanatory variables were included in the binary logit model which is expected to affect female labor force participation. In Table (4), Pseudo R\(^2\) indicated that the full model improved by 74.63% over the intercept model. The greater pseudo-R-squared values for the full model correlated to the intercept models show that the fitted the overall models, the better predict the outcome of the predicted variable. Prob>chi2 statistics confirm that the variables are together significant at a 1% significant level.

Seven variables were found to be statistically significant at 1% (woman’s age, women’s training, woman education level (secondary education), women’s, work experience, lack of capital and social problem presence of a child under 5 years of age variables was found statistically significant at 5% significance level of. however, 7 variables (Pregnancy, husband education level, low wage, physical weakness and low efficiency) were found to be statistically insignificant out of 14 variables.

Furthermore, the variables women’s age, women’s education level, training, work experience, and family size have a positive sign, and they are directly related to female participation in the labor force. Lack of capital, the presence of a child under 5 years of age, and the social problem has a negative sign. The negative sign shows that the variables are inversely related to the probability of woman’s being participate in the labor force.

However family size does not confirm the hypothesis which states family size has negative impact to women labor force participation and disagree the previous studies like Dessie, (2014) Gobebo et al.(2017) Women's joblessness is greater for those females with higher family sizes.

This may happen because two important situations in Ethiopia and Mizan Aman town:-

One there is high trend in Ethiopian family; children’s are assigned to act accordingly in their family. For example the old children order to care their younger brother and sister when mother go out from home to execute some work, also they are assigned to clean the home and other works. this helps the mother to participate in economic activity.

Second in the nuclear families mother and father faces high challenge of supplying basic needs to their children. As a result it pushes women to participate in whatever they found income for supplying basic need for survival.

Number of obs = 400 LR(chi\(^2\) = 382.72

Prob = 0.0000 Pseudo R\(^2\) = 0.7463
4.5. Factors affecting the level of women's contribution to household income

To determine the effects of the explanatory variables, linear models were initially estimated for defining the effects of some selected factors on female's contribution to a household income of different categories of households. The coefficient (R2) was 0.994, which implies that about 99.48 percent of the variation in female's contribution to household income was explained by the set of explanatory variables in the model. The value of adjusted R2 was 0.994, indicating that after taking into account the degree of freedom (d. f.), the five explanatory variables included in the model still accounted for 99.47 percent of the variations in the female's contribution to household income. The F-value stood at 15021.53 and the p-value 0.0000 was significant at 1 percent level. It measures the overall goodness of fit of the estimated regression model which is presented in Table 5.
The education regression coefficient was estimated to be 0.68. The coefficient was statistically significant and positive which indicates that women's contribution to household income increase. A one-year increase in education level leads the contribution's females to household income increase by 68 percent. The family size regression coefficient was -0.499. It suggests that a 1 percent increase in household size would lead to a decrease in women's contribution to household income by 49.9 percent if other variables remained constant. The training regression coefficient was 0.72 which means, a 1 percent increase in the rate of training would lead to an increase in women's contribution to household income by 72 percent if all other variables are constant.

The regression coefficient of work experience was estimated at 0.73 which indicates that a 1 percent increase in female work experience would increase women's contribution to household income by 73 percent, keeping other factors constant.

| Dependent variable total women income | Coef   | Std error | T     | p > t |
|--------------------------------------|--------|-----------|-------|-------|
| Education                            | 0.68** | 291.3284  | 3.02  | 0.003 |
| Pregnancy                            | 0.02   | 568.7527  | 1.39  | 0.165 |
| Family size                          | -0.499*| 0.0018364 | 271.75| 0.000 |
| Training                             | 0.72** | 178.8019  | 2.03  | 0.043 |
| Work experience                      | 0.73** | 553.8621  | 2.31  | 0.022 |
| Indebtedness                         | -0.003 | 553.86    | 2.33  | 0.47  |
| Constant                             | -61.52*| 1528.059  | -3.99 | 0.000 |

Source own computation 2021 significant level * 1% ** 5%

prob = 0.0000, R² = 0.9948, adj R² = 0.9947

4.6. Women’s perception about household decision making process

Even in the family, women in Ethiopia were frequently less concerned within the decision-making process level. In this study, an attempt was made to analyze the pattern of women's participation in the decision-making process and, their perceptions regarding this matter. The degree of women's involvement in decision-making has been calculated by five assorted scores given based on the decision-maker. The outcome shown in (Table 6) evidenced that the decision regarding the education of children takes the highest score 1,673. The second highest ranked decision is receiving credit which implies that the case of receiving the credit from the various bank and non-bank financial institutions requires the willingness of women. Similarly, the 3rd ranked decision is the vaccination of children. It is also clear that in the decision
of clothing children's decisions are not considered significant in most of the households than consider it as surprises their children.

Table 6
Women's perception about the household decision making process

| №  | Subject of Decisions | Extent of perception | perception index | Rank |
|----|----------------------|----------------------|------------------|------|
|    |                      | Strongly agree | Agree | neutral | Disagree | Strongly disagree |          |      |
| 1  | Buying or selling land | 99           | 97    | 63      | 60       | 81              | 1,273   | 8    |
| 2  | Taking or giving land on lease | 50       | 164   | 119     | 39       | 28              | 1,369   | 5    |
| 3  | Receiving credit      | 112          | 193   | 52      | 25       | 18              | 1,556   | 2    |
| 4  | House construction    | 150          | 39    | 70      | 76       | 64              | 1,332   | 6    |
| 5  | Vaccination of children | 143      | 90    | 42      | 111      | 14              | 1,553   | 3    |
| 6  | Participation in ceremonies | 128   | 111   | 56      | 49       | 54              | 1,293   | 7    |
| 7  | Education of children | 244          | 120   | 25      | 6        | 6               | 1,673   | 1    |
| 8  | Opening new business  | 8            | 29    | 107     | 102      | 154             | 835     | 9    |
| 9  | Clothing children     | 7            | 18    | 34      | 101      | 240             | 651     | 10   |
| 10 | Marriage of sons/daughter | 144   | 90    | 42      | 111      | 113             | 1,552   | 4    |

Source own computation 2021

4.7. Impact of women’s income on household decision making

For this model there is a heteroscedasticity problem. Therefore, to avoid the effect of heteroscedasticity robust logistic regression was employed for it compromises the effect of heteroscedasticity even if it exists initially. No multicollinearity problem. The model is adequate to describe the data was accepted and we conclude that the model is a good fit.

Regression of Logistic analysis: In studying the relationship between the decision level and different explanatory variables, a logistic regression model was found more suitable. Results of the logit model estimated through the maximum likelihood method have been shown in (Table 7). Education was grouped into three categories specifically illiterate, primary (grade 8 graduate), and secondary (high
school graduate). “Illiterate” was reflected as the reference category. Now education (1) shows primary education and education (2) points out secondary education. Assessment of coefficients using logit function directs that education has a positive and significant effect on the likelihood of taking most of the household decisions by the women alone. It was found that the regression coefficient of education was 6.05 times more likely to take household decisions as compared to illiterate respondents. One possible way of explanation for this can be that the higher the education of women, the better they are in terms of making household decisions.

Total women's income has a positive and significant effect on the likelihood of women making decisions on their own in the household. It was found that the regression coefficient of women's total income was 0.079 and its which implies that holding other factors constant if the women's income increases by one unit then the log of odds in favor of taking household decisions by women will increase by about 7.9 percent.

Occupational experience has a significant and positive effect on the probability of taking most of the different decisions by the women alone. The regression coefficient of occupational experience was estimated at 3.64 indicates that for a unit increase of occupational experience, the log of odds in favor of taking household decisions by women will increase by 3.64, keeping other factors constant.

Husband education has a positive and significant effect on the probability of taking most of the different decisions by the women alone. The regression coefficient of household education was estimated at 0.68. This indicates that for women with literate husbands, the log of odds in favor of taking household decisions by women will be greater by 0.68 than women with illiterate husbands, keeping other factors constant.

Training has a positive and significant effect on the likelihood of taking most of the different decisions being made solely by women. The regression coefficient of training was estimated at 2.64 indicates that for a unit increase of training, the log of odds in favor of taking household decisions by women was greater by 2.64, compare to have no taking training.

The regression coefficient of lack of capital was estimated at -0.31 indicates the log of odds in favor of taking household decisions by women was less by 0.31, compare to have capital.
### Table 7
Impact of women's income on household decision making logistic regression

| Decision-making process       | Coef. | Std error | Z    | p > z  | 95% conf. Interval     |
|-------------------------------|-------|-----------|------|--------|------------------------|
| Age                           | -2.23 | 2.11      | -0.11 | 0.916  | 3.9200106              |
| Education                     |       |           |      |        |                        |
| Education 1                   | 6.053*| 0.8869505 | 6.83 | 0.000  | 4.315273 7.792055      |
| Education 2                   | 6.452 | 2.1403982 | 1.66 | 0.567  | 4.521401.7.60 11.61    |
| Work experience               |       |           |      |        |                        |
|                               | 3.64* | 0.5735546 | 6.35 | 0.000  | 2.520589 4.768882      |
| Husband education             |       |           |      |        |                        |
| Illiterate                    | 4.452 | 2.1403329 | 1.60 | 0.367  | 3.521401 5.60 11.61    |
| Literate                      | 0.68***| 0.3844466 | 1.79 | 0.074  | -0.660232 1.44098      |
| Training                      |       |           |      |        |                        |
|                               | 2.64* | 0.5283296 | 4.99 | 0.000  | 1.60221 3.673224       |
| total women income            |       |           |      |        |                        |
|                               | 0.079*| 0.01625   | 4.89 | 0.000  | 0.0475666 0.1112655    |
| Capital (Lack of capital)     |       |           |      |        |                        |
|                               | -0.31***| 0.4134824 | -0.73| 0.06   | -1.11199 0.5088313     |
| Constant                      |       |           |      |        |                        |
|                               | -5.75 | 0.9565172 | -6.02| 0.000  | -7.631865 3.882387     |

Number of obs = 400 LR chi² = 282.44 prob = 0.0000 pseudo R² = 0.5508

significant level * 1% ** 5% *** 10%

### 5. Conclusion And Recommendations

#### 5.1 CONCLUSION

No one can argue that women who use their knowledge to create valuable goods and services and solve societal problems are important components of economic development. According to the study, the economic role of women is vital in the town not only contribute to household income but also increasing family consumption because of income increases. As a result, for economic development to occur, women's role is significant. Based on the findings of the investigation on the role of women in economic participation, we can conclude that women's role and involvement in the economic development of the country as well as in the town is very significant even if there are some constraints. As the role of women rises, economic development will increase, and poverty decrease. female participation in economic activities is important to improve personal well-being investment enables households to feed themselves and their family members, housing conditions, nutrition and access to the participation of females in an economic activity like lack is creditability, legal regulatory, barrier, dual role in house and home. Moreover,
women's economic role is not only the most effective way of increasing household income but also it is the main instrument of achieving food security. Therefore, economic growth is unlikely without the active involvement and contributions of females.

5.2. RECOMMENDATIONS

It is found that female participation in economic activities positively depended on women's, work experience, age, education, and training however women's participation was negatively affected by the social problem presence of a child under 5 years of age.

Therefore, the government and local government should provide special attention to women who have children under five years of age and those who face social problems in facilitating the environment to work outside the home. The government and concerned bodies would formulate and provide training that makes females active and competent to do all activities outside their home.

The regression result of capital from was significant, which confirms that the woman who has a problem of capital is unable to decide by themselves. Then Banks or other financial institutions should give credit to women, to increase women's labor force participation and woman's decision-making power.

Therefore, it better-providing training promotes women to learn more, establish child daycare centers for child and access to credit for a woman to have enough capital. At this point, both the households and the government should work together to find possible solutions.

Declarations

Competing interests: The authors declare no competing interests.

Consent: participates/patient (or legal guardian) consented to participate in the study

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