



## The Women Empowerment in Agriculture Sector of Pakistan

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ARTICLE DETAILS	ABSTRACT
<b>History:</b> Accepted 28 February 2022 Available Online March 2022	<i>The study interviewed 100 households in the Sargodha District of Pakistan's Punjab Province, which is the largest and most populated province. The study used a multistage sample process for sampling and interviewed male and female residents of the Sargodha district. The WEAI was calculated using Alkire and Foster's (2011) technique. The women empowerment agricultural index is used to assess women's empowerment. These five factors 5DE identifies the important areas where empowerment must be strengthened, whereas gender parity depicts the relative discrepancy between male and female members of the same family. For the Sargodha district, the Women Empowerment in Agriculture Index value is 0.61. It is calculated by taking 90% of the 5DE sub index value of 0.66 and adding 10% of the GPI value of 0. 68.</i>
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### 1. Introduction

Women's empowerment increases their freedom of choice in order to change their lives. The term "empowerment" is used to describe both a process and a result of empowering organizations or individuals. Women's empowerment is often seen as critical for sustainable economic growth and poverty reduction in developing nations (Klasen, 1999). Women's empowerment and gender equality have become a major emphasis of several international development organizations as a result of the existence of Millennium Development Goals (MDGs) and Sustainable Development Goals. Women's economic and social empowerment has been a priority on numerous countries' agendas. Given the positive logic association between poverty and disempowerment, this trend is gaining traction, as failure to meet fundamental requirements typically precludes inability to make crucial decisions (Malhotra et al. 2002; Mowla, 2009).

Women make up around 43 percent of the agricultural work force in emerging nations (FAO, 2010). Agriculture employs 40 percent of males and 70 percent of women in South Asia. 60 percent of women in Sub-Saharan Africa work in agriculture, both directly and indirectly (ILO, 2010). Women's empowerment is promoted by international organizations such as USAID, UN Women, UNIFEM, CARE, WGEF, IFAD, Bill & Melinda Gates Foundation, IFPRI, and OPHI. These groups advocate for women's

rights and raise awareness of gender-related issues in order to increase women's empowerment at household, in communities, and globally.

Development goals cannot be met without reducing gender inequities and increasing women's empowerment, according to feminist and developmental literature. The importance of women's empowerment in international development is obvious from the 17 Sustainable Development Goals (SDGs) established by world leaders in the 2030 Agenda. Women's empowerment has been defined as the dissemination of a society's ideals and knowledge. Money, income, employment, pleasant working environment, freedom to speak, social and economic resources, political expression, freedom of mobility to access numerous services, control over one's body, reproductive options, and sexuality are some of the key focuses (Kabeer, 2005).

Women's empowerment entails establishing conditions that allow women to make decisions, implying that while women may have different preferences than men, they also have different ability to make decisions due to gender differences in bargaining power and access to resources. Women's empowerment is expected to lead to female self-equity, rights, and fulfilment, despite the popular belief that women's support leads to better family, society, country, and economy.

In Pakistan, the agriculture sector, which is one of the most important, contributes 21.4 percent to GDP and 45 percent to the overall growth of the country. The agriculture sector is critical in decreasing poverty since it is the poor's primary source of income (FAO, 2011; Cervantes-Godoy & Dewbre, 2010). It is divided into four sub-sectors: livestock, forestry, agricultural production, and fisheries (GOP, 2014-15). Rural women actively participate in the primary fields, agricultural production, and livestock in Pakistan's agriculture sector, which cannot be overlooked. Women carry out their tasks as workers when planting, reaping, and nurturing crops (FAO, 2015).

Rural women make a significant contribution to agriculture, but their contribution is rarely appreciated in monetary terms because they labour as unpaid household workers. They face several hurdles as urban women in terms of sociocultural, socioeconomic, traditional, authorised, and emotional constraints that prevent them from asserting their rights in agriculture. Due to a lack of land ownership, rural women are unable to make decisions about several aspects of agriculture. Women have a lot of responsibilities and a strong presence, yet their economic engagement goes undetected. Some cultural traditions and social regulations exist in underdeveloped nations that prohibit society from handing up rights to women as authorised, limiting their empowerment.

Land rights for women are one of the most important tools for promoting development and household welfare (Allendorf, 2007). Women rarely own land since they "give something for free" and have little control over their earnings. Women are excluded from decisions about manufacturing processes, management, and input choices. They perform as covert labour, and their modest contributions go unacknowledged, which is the primary source of women's powerlessness (Quisumbing, Behrman, & Peterman, 2011).

Rural women are compelled to work because of uneven access to assets, services, and infrastructure. Rural women's constraints impose significant social, economic, and environmental costs on society and rural growth, resulting in distinct gaps in agricultural productivity (Ghana, 2011). Women's efforts and participation are sometimes overlooked, especially in emerging and disadvantaged nations (Khan, 2007). Women have an important part in agricultural and rural non-farm economies in practically every country on the planet. Rural women manage a complicated home system and employ a

variety of living techniques, including agricultural cultivation, livestock management, food preparation, and family care.

Women's roles and responsibilities vary depending on their location, customs, and traditions. Because Pakistan is a predominantly male-dominated country, female authorisation is quite limited. Aside from societal norms and limitations that rural women confront, lack of access to resources and credit limits are among the most significant obstacles. Rural women labour for a living, yet often receive less in exchange for their efforts. Women, too, confront challenges in achieving empowerment owing to a lack of educational attainment, work skills, and mobility. The Pakistani government, political circles, and non-governmental organisations (NGO's) are all working hard to ensure that policies and programmes that support rural women are implemented. The major goal is to provide women with equal opportunities, which will lead to increased female empowerment and, in turn, a higher social status. Gender reform action plans (GRAPs) and the Benazir Income Support Program (2012) are the two primary national and provincial initiatives of the Ministry of Women Development Department (WDD). CARE, WGEF, USAID, IFAD, IFPRI, and OPHI are just a few of the international organizations aiming to improve female empowerment. The study aims to measure the women empowerment index in agriculture section in case of Sargodha district of Punjab province of Pakistan.

## **2. Literature Review**

In Pakistan, Malik and Courtney (2012) investigated women's participation in higher education and its influence on empowerment. This study employed questionnaire data from eleven public institutions in Pakistan, as well as semi-structured interviews, to demonstrate women's participation in higher education. The findings of this study revealed that women's participation in higher education allows them to have an impact on inequitable behaviours and affect positive change. It was found that higher education has been an essential weapon for women's empowerment in terms of societal transformation.

Bushra and Wajiha (2013) examined many elements that have an impact on women's empowerment in Pakistan. It also explored the obstacles that women face in achieving their full potential. Data was gathered from two prestigious Lahore colleges. The elements that impede women's empowerment were investigated using the Multiple Regression approach in this study. The findings demonstrated that educational content had a positive link with factors of women's empowerment, however economic engagement and economic opportunity for women had a negative relationship with determinants of women's empowerment.

In Pakistan, Fatima (2013) looked at the link between education, employment, and female family autonomy. Women's decisions on family planning and expenditure on food, clothes, and medical care have been highlighted as indicators of household empowerment. The Pakistan Social and Living Standard Measurement Survey (PSLM) data from 2007-2008 were used in this study. The Linear Probability Model (LPM) was used. The findings demonstrated that education and work boosted women's decision-making autonomy in the home. It has been determined that employment empowers women in decision-making expenditures but not in family planning decisions.

Sharma, Rao, and Sharma (2013) investigated women's engagement in agricultural, family, and animal management decision-making in the Jammu district. It was discovered that women's participation in decision-making was critical to the country's rapid economic progress. This research included a sample of 200 rural women from three villages in Jammu district. The interview approach was chosen, as well as cross-questioning strategies. Men made the decisions about purchasing and

selling property and other agricultural operations, according to the findings. Heads of families or spouses oversaw livestock management.

In Ethiopia, Tafera (2013) explored the influence of land ownership reform on women's empowerment in land management decision-making at the household level. In Ethiopia, data was collected from three districts, with 394 households chosen as a sample. The Women Empowerment Index (WEI) was utilised in this study to illustrate the impact of reform in "with" and "without" conditions. The findings demonstrated that males still dominated land-related choices. With land tenure reforms, however, small changes have occurred in favour of women.

In Brazil, Agenor & Canuto (2013) investigated the growth benefits of gender-based long-term strategies in developing nations. To examine the link between economic growth and gender inequality, this study used an overlapping generation model that included topographies such as women's time allocation, health externalities, female bargaining power, and human capital accumulation. The goal was to improve infrastructure and reduce gender bias. The data for this study came from the 2012 National Household Sample Survey (PNAD) in Brazil. Due to lesser income gaps in some places, the results indicated gender discrepancies. The greatest gaps, however, were seen in the Northeast. It was established that long-term gender-based inequality policies in Brazil had a major influence on women's time allocation, child raising, and negotiating strength.

Badar et al. (2014) looked at the influence of education and marriage time on female empowerment at the household level in Pakistan. The data for this study came from the Bhawalpur region. To determine the impact of education and marriage on women's empowerment, the questionnaire technique was used. According to the findings, 8% of illiterate women had a high degree of empowerment, whereas 33% of women in primary or middle school had a high level of empowerment. It was established that there was a strong link between education, marriage, and women's empowerment in the home.

Saraboni et al. (2014) investigated female autonomy in agriculture and their significance in rural Bangladeshi food security. At the home level, there is an empowerment gap in terms of per capita calorie availability and dietary diversity. The data for this study came from the 2012 Bangladesh Integrated Household Survey (BIHS). The Women Empowerment Agriculture Index (WEAI) and the Body Mass Index (BMI) were used to investigate the relationship between women's empowerment and calorie availability. The study's findings revealed that enhanced female empowerment had a beneficial impact on calorie availability at the family level. It was also discovered that women's empowerment had a detrimental influence on household decision-making and credit related to male BMI.

Ghosh and Ghosh (2014) inspected the tendency of women involvement in agriculture under/ across different Indian regions. This study also clustered women's economical participation in India. This study used secondary data source based on previous studies from 1961-2001 to check growth trend of agriculture worker. Compound growth Rate (CGR) has been recognized to show growth trend in India. This paper concluded that female involvement had increased with time and these women got the status of "agricultural worker".

Assaad, Nazier, and Ramadan (2014) investigated the impact of several individual and socio-demographic variables on women's empowerment in Egypt. This study focused on two aspects of women's empowerment: mobility and household decision-making authority. The data for this study came from the Egyptian Labor Market (ELMPS) in 2012. For the estimate of women's intervention at

the home level in Egyptian society, the Decision Making Index (DI) and Mobility Index (MI) were utilised. The study's findings revealed that female empowerment climbed with age and subsequently began to decline. Furthermore, factors such as age, occupation, poverty, and the number of children had distinct effects on women's empowerment.

Masood and Jamil (2015) studied the role of women in Pakistan's agricultural and dairy industries. It has been explored how women have improved their social status. The qualitative data in this sociological research was utilised to demonstrate female engagement in agriculture. The findings revealed that variables such as training programmes, hurdles to women's involvement, and discriminatory attitudes have an impact on women's health in rural regions, limiting their ability to participate effectively in agriculture and the dairy business.

Pervin, Khan, and Shah (2015) investigate the Female power behaviours and their effect in ancient Dhaka. It has been stated that the family is the most important source of female power to enable and practise as an active part of female empowerment. Primary data was gathered from densely inhabited residential areas in old Dhaka. The Women Power Index (WPI) was utilised in this study to highlight the female power practises in this city. The findings showed that women's engagement in income-generating activities had a greater impact on the WPI than the degree of outcome. It was established that female practise power in Dhaka city is moderate, not high.

Chughtai, Zaheer, and Taj (2015) evaluated the influence of micro financing on women's income, savings, and empowerment in Pakistan. Over 250 people from the tehsil Hassan Abdal (Attock district) were recruited for this study. This was accomplished using Multiple Regression. Women from less developed countries were found to be feeble and weaker than women from developed countries. According to the study microcredit has a beneficial influence on women's empowerment.

Hassan and Uddin (2016) explored the patterns of female empowerment in Bangladesh in terms of health seeking performance. This research looked at whether female empowerment is crucial for long-term growth. The data for this study came from the 2011 Bangladesh Demographic and Health Survey (BDHS). The relationship between female empowerment in terms of health seeking behaviour and socioeconomic variables was demonstrated using logistic regression. According to the findings, 63 percent of women felt empowered to choose their own health-seeking behaviour, and 66 percent were active in their children's health care. Women's empowerment was shown to be a more essential component since they are financially self-sufficient and can readily participate in decision-making.

In Pakistan, Ishaq and Memon (2016) researched the huge involvement of rural women and the reasons for their participation in agricultural operations. It also demonstrated the limitations that women experience in terms of empowerment. The data for this study came from three locations in Pakistan's Lahore province. To demonstrate female autonomy in agriculture, a questionnaire approach and Focus Group Discussions (FGD) were used. The findings of this study revealed that women were mostly involved in agriculture and livestock production. It was discovered that women faced socioeconomic barriers and were not as active in agricultural marketing as males.

Kim, Lee, and Shin (2016) investigated the effect of gender disparity on long-term economic growth to build a model. The model that predicted female labour participation and human capital accumulation was also explored in this study. To demonstrate the performance of economic growth, micro-level data from Asia's economies was used, as well as policy experiments. The results revealed that by removing gender, the yearly growth rate of per capita income increased by 1% and 0.2 percent,

respectively.

Pavanello et al. (2016) investigated the relationship between social protection and female autonomy in rural areas. It has concentrated on the job component of Rwanda's Vision Umurenge Programme (VUP) 2020, which aims to alleviate poverty by providing statewide social safety. Data was obtained in Rwanda using a mixed technique approach that included qualitative and quantitative questionnaires. According to the findings, VUP only promotes female economic growth, because women have less agricultural assets than males. There is no link between VUP public works activity and empowerment, according to the findings.

Shakya (2016) investigated the effects of microcredit on Nepalese women. Microcredit has been suggested as a tool for reducing poverty and improving economic standards. Primary and secondary data sources were utilised in this investigation. The questionnaire approach was used to demonstrate the impact of microcredit on women in this city and community. The findings demonstrated a favourable relationship between income and savings at various interest rates. According to the survey, impoverished villagers had a higher interest rate and had less access to money than Nepalese women.

Temba (2016) investigated how women's economic empowerment has influenced microfinance at Tanzania's Akiba Commercial Bank. The variables that affected women's economic empowerment have been examined. This study examined primary and secondary data sources and included clients and loan department employees from a commercial bank, totaling over 660 people. The approach of interview and questionnaire was used. The study's findings revealed that women were greatly impacted by microfinance loans and savings services. It was discovered that microfinance organisations charged high interest rates.

Spriggs et al. (2017) investigated rural Pakistani women's empowerment and economic partnership. It was shown that empowering women enhanced their household's chance of participating in various activities by utilising their abilities. The data for this study came from 750 rural Pakistani households. As part of the Agriculture Sector Linkages Program, a personal interview survey was undertaken (ASLP). The findings revealed that women's empowerment in home decision-making increased their chances. It was shown that women's participation in home decision-making was negatively related to household income but positively related to husband's education and age.

Akter et al. (2017) presented empirical information from four Southeast Asian nations, namely Myanmar, Thailand, Indonesia, and the Philippines, to analyse the inclusive landscape of gender imbalance. It looked at geographical disparities in women's empowerment. Data was obtained from 290 women from the nations listed above. The Women Empowerment Agriculture Index (WEAI) and 37 Focus Group Discussions were employed in this study (FGD). The study found that women had equal access to productive resources including land and inputs, as well as more influence over their households. It was established that women play an important part in agricultural organisations in Thailand and the Philippines, but that their function is less successful in Indonesia and Myanmar because of male dominance.

Kleven and Landais (2017) investigated gender attitudes along the developmental path and attitudes toward working women with children. It shown that when GDP per capita grew, so did people's attitudes. This study drew on a database of 248 micro surveys conducted in 53 countries between 1967 and 2014. Gender convergence was discovered at all levels of development, according to the findings. It also concluded that children had a significant impact on gender disparities at both the low and high

levels of development.

### 3. Data and Methodology

The study selected Sargodha District of Punjab Province of Pakistan for data collection. For sampling purpose, the study followed multi-stage sampling methods, as Sargodha is divided into seven tehsils. The study selected Sargodha tehsil among seven tehsils by using random sampling technique. Further, one rural and one urban settlement has been selected by random sampling. Furthermore, 100 households were interviewed from these settlements.

#### 3.1 Questionnaire Design

The household questionnaire is being employed in order to meet the study goals. OPHI's questionnaire design was employed in the study. There are six sections to the questionnaire. The roaster file was included in OPHI's questionnaire to investigate the household's family structure. The second section contains several questions that gathered data on decision-making in farm production activities, as well as their autonomy or motive in decision-making. The third portion contains questions about asset purchases, sales, and transfers. The fourth component consists of questions concerning how they spend their money. The fifth component contains questions regarding group membership and public speaking comfort, while the last piece includes questions about how much time they spend on work or leisure.

**Table 1: The Domains, Indicators, and Weights in the WEAI**

<b>Domain</b>	<b>Indicators</b>	<b>Weight</b>
<b>Agriculture Production</b>	Input in productive decision	0.10
	Autonomy in production	0.10
<b>Resources</b>	Ownership of assets	0.07
	Buy, sale, transfer of assets	0.07
	Access, decisions about credit	0.07
<b>Income</b>	Control over use of income	0.02
	Group member	0.10
<b>Leadership</b>	Speaking in public	0.10
	Workload	0.10
<b>Time</b>	Leisure	0.10

#### 3.2 Empirical Methodology

The study used Alkire and Foster's (2011) technique for For estimation purposes, . There are two sub-indices in the Women Empowerment Agriculture Index (WEAI): The first is the 5DE, which measures women's empowerment, and the second is the gender parity index, which measures women's empowerment in the home. 5DE has a weight of 90%, whereas GPI has a weight of 10%. WEAI is the weighted sum of 5DE and GPI. Any improvement in either of these two areas will benefit the whole WEAI.

**4. Results and Discussion**

We estimated two indices for the estimation of women empowerment in case Sargodha District of Punjab province of Pakistan i.e. 5DE and GPI. Firstly, we assessed the women disempowerment index ( $M_o$ ) and decomposed it into contributions by dimensions and indicators for women. We also represent the decomposition of ( $M_o$ ) for the sample of male because the alignment of male deprivations in empowerment is extremely different from women’s. WEAI revealed the basic areas that added most to female disempowerment. Below table shows that Women Empowerment in Agriculture Index value is 0.61 for Punjab province. It is estimated that by taking 90 percent of 5DE sub index value 0.66 and adding 10 percent of GPI value 0.68.

**TABLE 2: THE 5DE AT K=0.2**

$5^{DE} = 1 - M^o$			
	Women	Men	Regional
Total Observations	100	100	200
Ratio of Disempowered Headcount ( $H^d$ )	77.0%	62.1%	71.0%
Score of Average Inadequacy ( $A^d$ )	33.1%	34.1%	35.9%
( $M_o = H^d \times A^d$ ) Index of Disempowered	0.311	0.189	0.279
( $5DE = 1 - M_o$ ) Five Domains of Empowerment	0.660	0.628	0.610
<b>Percentage of Parity in Dual HHs</b>			
$GP^{INDEX} = 1 - (H^{GPI} \times I^{GPI})$			
Women in Percentage with Gender Disparity ( $H^{GPI}$ )	59.9 %		
Average Gap of Empowerment ( $I^{GPI}$ )	44.8 %		
Gender Parity Index ( $GP^{INDEX}$ )	0.689		
WEAINDEX	0.610		

Source: Author’s computations

Note: WEAI = Women Empowerment in Agriculture Index; 5DE = five domains of empowerment

First sub index 5DE for sample region shows that 21% of women are empowered and 77% of women are disempowered. On average inadequacy score of women is equal to 33.1%. It means that these women have 33.1% inadequate achievements in domains.

Likewise, 62.1% of men are disempowered and they have on average inadequate attainment in 34.1% of dimensions.

**4.1 Women Disempowerment Decomposed by Domains**

Results reveal that the domain which contributes most to women’s disempowerment is weak in leadership 27%, Income 26%. Malapit et al. (2014) finds the similar results in case of Bangladesh



where community leadership and control over use of income domains as main contributing factors of disempowerment index. Women have little bit disempowerment in production (i.e. 12%) and the same trend have been found in the study by Alkire et al. (2013).

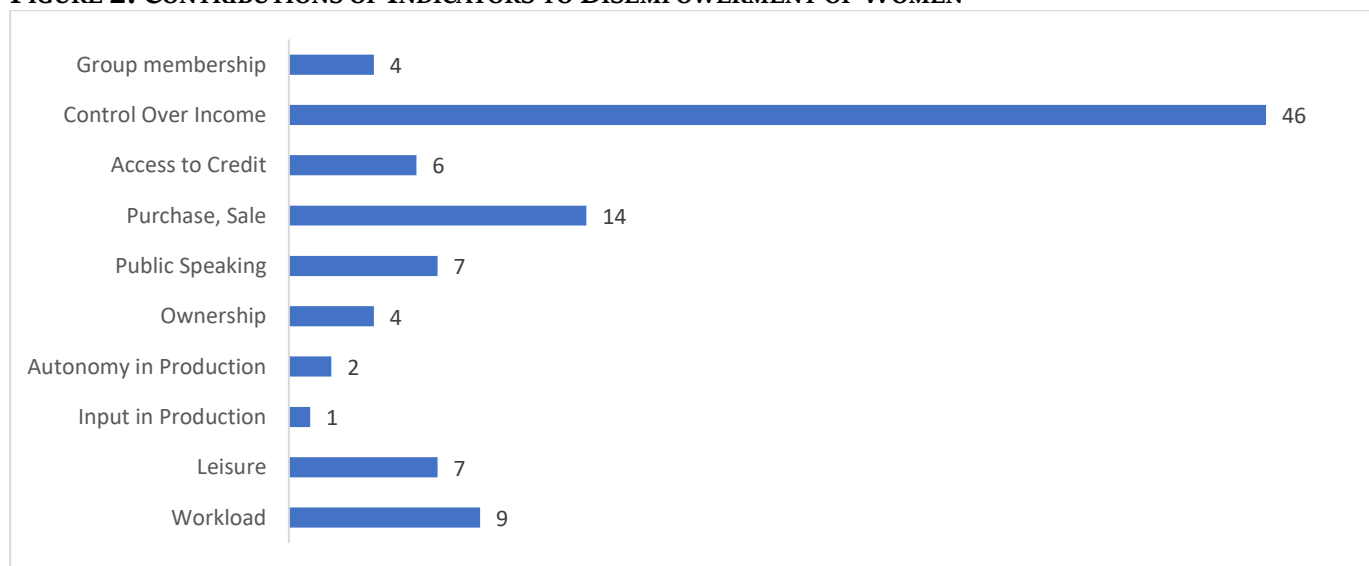
**FIGURE 1: PERCENTAGE CONTRIBUTIONS BY DIMENSION INTO DISEMPOWERMENT OF FEMALE**



**4.2 Women Disempowerment Decomposed by Indicator**

Our indicator wise results show that 4% of women disempowerment contribution in autonomy in production and their contribution to control over use of income is 46%. Contribution of women in group membership is 4% and 7% in public speaking. Indicator of workload shows 9% contribution of women and leisure has 7% female contribution to disempowerment index.

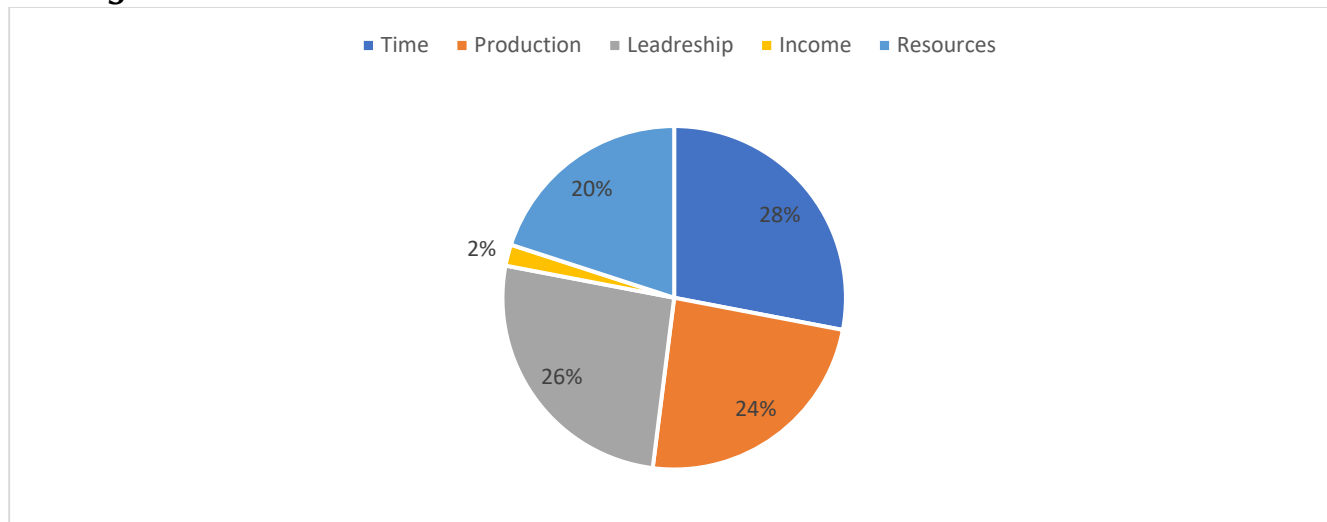
**FIGURE 2: CONTRIBUTIONS OF INDICATORS TO DISEMPOWERMENT OF WOMEN**



**4.3 Man, Disempowerment Decomposed by domain**

The arrangements of male’s inadequate achievement are vary from females in sample area. Leadership adds more to male disempowerment 24% followed by having time allocation 28%. Whereas control over income contributes small portion to disempowerment of male that is 26% than female. However, male have equal disempowerment over autonomy in production and lack of access over resources as compared to female.

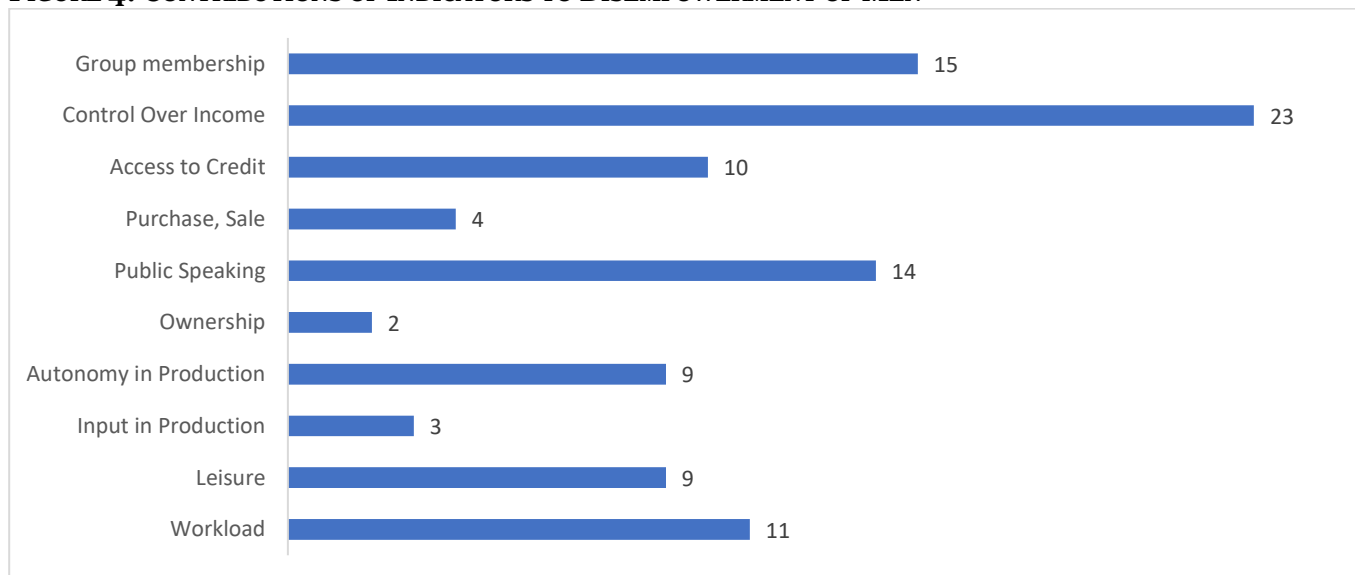
FIGURE 3: PERCENTAGE CONTRIBUTIONS BY DIMENSION INTO DISEMPOWERMENT OF MALE



#### 4.4 Man Disempowerment Decomposed by Indicator

According to our results, male contribution to input in productive decision is 9% while 9% in autonomy in production. 2% of men contribute to ownership of assets, 4% to purchase, sale and 10% to credit access & control. Men contribution to disempowerment index to group membership is 15% and 14% to public speaking. Workload contribution of male in index is 11% and to leisure contribution of disempowerment index is 9%.

FIGURE 4: CONTRIBUTIONS OF INDICATORS TO DISEMPOWERMENT OF MEN



## 5. Conclusion & Policy Recommendations

Women's empowerment is examined in this study using the Women Empowerment Agriculture Index. This indicator compares rural women to their male counterparts in terms of five domains of empowerment (5DE) and gender parity index GPI. These five parameters 5DE identifies the important areas where empowerment must be strengthened, whereas gender parity depicts the relative discrepancy between male and female members of the same family. The WEAI was calculated using Alkire and Foster's (2011) technique. WEAI's findings highlighted the main areas that contributed the most to female disempowerment. Weak leadership (27%) and income (26%) are the domains that

contribute the most to women's disempowerment. Malapit and colleagues (2014). Our result conclude that 4 percent of women's disempowerment contributes to production autonomy, whereas 46 percent contributes to income control. Women make approximately 4% of organisation membership and 7% of public speaking participation. Workload has a 9 percent female contribution, whereas leisure has a 7 percent female contribution to the disempowerment index. Equal micro credit facilities should be offered to women since it is the primary platform through which women may share their experiences and knowledge about all parts of life, and women have been empowered via microfinance loans and savings services.

## References

- Agenor, P., & Canuto, O. (2013). Gender equality and economic growth in Brazil: A long-run analysis. *Journal of Macroeconomics*, 38(2), 155-172.
- Alkire, S., Meinzen-Dick, R., Peterman, A., Quisumbing, A., Seymour, G., & Vaz, A. (2013). The women's Empowerment in Agriculture Index. Oxford Department of International Development Working paper No. 58.
- Allendorf, K. (2007). Do women's land rights promote empowerment and child health in Nepal? *World development*, 35(11), 1975-1988.
- Ansoglenang. (2006). Rural women and micro-credit schemes: cases from the Lawra District of Ghana (Master's thesis). University of Tromso, Ghana.
- Alsop, R., & Heinsohn, N. (2005) Measuring empowerment in practice: Structuring analysis and framing indicators. World Bank Policy Research Working paper No. 3510.
- Assaad, R., Nazier, H., & Ramadan, R. (2014). Individuals and households determinants of women empowerment: Application to the case of Egypt. *Economics Research Forum Working Paper No. 867*.
- Amin, S. N. Selim and N.Kamal (2006) 'Causes and Consequences of early marriage in Bangladesh' Population Council, Dhaka, Bangladesh.
- Balioune-Lutz, M. (2007). Globalisation and gender inequality: Is Africa different? *Journal of African Economies*, 16(2), 301-348.
- Bhagowalia, P., Menon, P., Quisumbing, A. R., & Vidhya Soundararajan, J. (2012). What dimensions of women's empowerment matter most for child nutrition. Evidence using nationally representative data from Bangladesh. *International Food Policy Research Institute Discussion paper No. 1192*.
- Charman, A. J. E. (2008). Empowering women through livelihoods orientated agricultural service provision: a consideration of evidence from southern Africa. *World Institute for Development Economics Research, Research paper No. 01*.
- Chaudhry, I. S., Nosheen, F., & Lodhi, M. I. (2012). Women empowerment in Pakistan with reference to Islamic Viewpoint: An empirical study. *Pakistan journal of Social Sciences*, 32(1), 171-183.
- Cheston, S., & Kuhn, L. (2002). Empowering women through microfinance. In S. Daley-Harris (Eds.), *pathways out of poverty: Innovation in microfinance for the poorest families* (pp. 167-228). Bloomfield, Connecticut: Kumarian Press.
- Chowdhury, S. S., & Chowdhury, S. A. (2011). Microfinance and women empowerment: A panel data analysis using evidence from rural Bangladesh. *International journal of Economics and Finance*, 3(5), 86-96.
- Deshpanda, R. & Burjorjee, S. M. (2001). Increasing access and benefits for women: practices and innovations among microfinance institutions (Report No. 18). Islamabad: Sustainable Development Policy Institute.

- Dolberg, F. (2001). A livestock development approach that contributes to poverty alleviation and widespread improvement of nutrition among the poor. *Livestock Research for rural Development*. 13(5). Retrieved from <http://www.lrrd.org/lrrd13/5/dolb135.htm>
- FAO, (1995). *The status and extent of women's participation in agriculture*. Rome, FAO.
- Gallaway, H., & Bernasek, A. (2004). Literacy and women's empowerment in Indonesia: Implication for policy. *Journal of Economic issues*, 38(2), 519-525.
- Gupta, K. & Yesudian, P. (2006). Evidence of women's empowerment in India: a study of socio-spatial disparities, *Geo journal*, 65, 365-380.
- Hashemi, S. M., Schuler, S. R., & Riley, A. P. (1996). Rural credit programs and women's empowerment in Bangladesh. *World Development*, 24(4), 635-653.
- Hasan, N., Uddin, G. (2016). Women empowerment through health seeking behavior in Bangladesh: Evidence from a national survey. *South East Asia Journal Of Public Health*, 6(1), 40-45.
- Hossain, A. (2011). Socio-Economic Obstacles of Women Empowerment in Rural Bangladesh: A Study on Puthia Upazila of Rajshahi District. *Research on Humanities and Social Sciences*, 01(2), 01-12.
- Ibrahim, S. & S. Alkire. 2007. Agency and empowerment: A proposal for internationally comparable indicators. *Oxford Development Studies*, 35(4), 379-403.
- International Food Policy Research Institute. (2001, August). *Empowering women to achieve food security (Brief no 3)*. Washington,.
- Ishaq, W., & Memon, S., (2016). Roles of women in agriculture: A case study of rural Lahore, Pakistan. *Journal of Rural Development and Agriculture*, 1(1), 1-11.
- Kamal, N., & Zunaid, K. M. (2006). *Education and women's empowerment in Bangladesh*. Centre for Health Population and Development at Independent University, Bangladesh, Dhaka Working paper No. 11.
- Kabeer, N. (1999). Resources, agency, achievement: Reflection on the measurement of women's empowerment. *The journal of Development and change*, 30, 435-464.
- Kabeer, N., & Natali, L. (2013). *Gender equality and economic growth: Is there a Win-Win?* Institute of Development Studies Working Paper No. 417.
- Kamal, N., & Zunaid, K. M. (2006). *Education and women's empowerment in Bangladesh*. Center for Health Population and Development at Independent University, Bangladesh, Dhaka Working Paper No. 11.
- Kato, M. P., & Kratzer, J. (2013). Empowering women through microfinance: Evidence from Tanzania. *Journal of Entrepreneurship Perspectives*, 2(1), 31-59.
- Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2003. *Governance Matters III: Governance Indicators 1996-2002*. Policy Research Working Paper 3106, World Bank, Washington, DC.
- Kharal, R.Z., 2000. *Women and Rural Development in Pakistan*,. *Kisht-e-Nau*, Magazine of Agriculture University Faisalabad- Pakistan. 25-6.
- Khattak, Saba, Nazish, B., & Wajiha, A. (2010). *Women's land rights: Research focus more findings from Pakistan (Report No. 18)*. Islamabad: Sustainable Development Policy Institute.
- Malapit, H., Kadiyala, S., Quisumbing, A., Cunningham, K., & Tyagi, P. (2014). *Women's empowerment in agriculture, production diversity, and nutrition: evidence from Nepal*, International Food Policy Research Institute Discussion Paper 01313.
- Mudaliar, A., Mathur, A. (2015). *Women Empowerment through Microfinance*. *International Journal of Arts, Humanities and Management Studies*, 1(2), 58-65.
- Nazier, H., & Ramadan, R. (2014). *Determinants of women empowerment: Application on the case of Egypt*. Department of Economics and Political Sciences, Cairo University, Egypt.

- Noreen, G., & Khalid, H. (2012). Gender empowerment through women's higher education: Opportunities and possibilities. *Journal of Research and Reflections in Education*, 6(1), 50-60.
- Pakistan, Government of (2017-2018) Pakistan Economic Survey. Islamabad: Ministry of Finance, Government of Pakistan.
- Pavanello, S., & Pozarny, P. (2016). Research on rural women's economic empowerment and social protection: The impacts of Rwanda's Vision 2020 Umurenge Programme (VUP).
- Sraboni, E., Malapit, J., Quisumbing, R. & Ahmed, U. (2014). Women's Empowerment in Agriculture: What Role for Food Security in Bangladesh?, 61, 11-52.
- SADAF, S., JAVED, A., & LUQMAN, M., (2006). Preferences of Rural Women for Agricultural Information Sources: A Case Study of District Faisalabad-Pakistan, *Journal of Agriculture & Social Sciences*, 2(3), 145-149.
- Shoaib, M., Saeed, Y., & Cheema, S., (2012). Education And Women's Empowerment At Household Level: A Case Study Of Women In Rural Chiniot, Pakistan, 2(1), 519-526.
- Saghir, A., Hassan, Z., & Javed, A. (2005). Gender Participation in Crop Production Activities: *Journal Of Agriculture & Social Sciences*, 01(4), 343-345.
- Srivastava, M. (2009). Essay on Women Empowerment, Social Science Research Network, pp 1-2.
- Taj. S., Bashir, A., Shahid, R., & Shah, H. (2012). Livestock development through micro-credit: A hope for poor resource women in rural areas of Faisalabad, Punjab. *J. Agric. Res*, 50(1), 135-143.
- Tefera, T. (2013). Land ownership- the path towards rural women empowerment: A case study from Southern Ethiopia. *Int. J. Social. Anthropol*, 5(8), 330-338.
- Thomas, A., Blakley, D., Jeremy, S. & Justin, W. (2015). "Crowd funding in a prosocial micro lending environment: examining the role of intrinsic versus extrinsic cues". *Entrepreneurship*, 39 (1), 53-73.
- Vani S. Kulkarni, Women's empowerment and microfinance, An Asian perspective study, occasional papers, Knowledge for development effectiveness, 2011.
- Wrigley-Asante, C. (2011). Out of the dark but not out of the cage: women's empowerment and gender relations in the Dangme West district of Ghana. *Gender, Place & Culture*, 1-20.