

OBSTACLES AND CHALLENGES FOR WOMEN EMPOWERMENT IN AGRICULTURE: THE CASE OF RURAL PUNJAB, PAKISTAN

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The study aims to examine the women empowerment in rural areas of Punjab, Pakistan. The current paper contributes to the literature by presenting the empirical evidence of women empowerment in agriculture. Women empowerment in agriculture index (WEAI) was used for measuring women empowerment of the 300 rural households. Primary data were collected from three (3) districts of the Punjab province. The quantitative data analyzed by using appropriate statistical techniques. The results of the study showed disempowerment of women in agriculture with varying degree in all three selected regions of Punjab. The WEAI results for the Central Punjab (Jhang) is 0.034. It is the average weighted score of the five empowerment domains (5DE) value of sub-index is 0.689 and the Gender parity index (GPI) sub-index value of 0.686. Results for South Punjab (D.G.Khan) is 0.578. The weighted score of the sub-index value of 5DE is 0.498 and the sub-index value of GPI is 0.782, and for North Punjab (Chakwal) is 0.784 and the average weighted score of the sub-index value of 5DE is 0.745 and the sub-index value of GPI is 0.598. The empowerment gap between men and women in the same household is relatively momentous at 26.9 and 36.9% in Central and South Punjab but less significant in North Punjab at 53.8%. A strong correlation between age of the household, education and empowerment was found. Lack of control over income and lack of control over resources are found as the domains that contribute most to women disempowerment. Lack of leadership in community and lack of availability of time domains that contribute most to men disempowerment.

Keywords: Women empowerment, WEAI, agriculture, rural areas.

INTRODUCTION

The concept of empowerment is defined by many authors and organization in many ways but most precise and widely used definition comes from Kabeer (1999) “the process by which those who have been denied the ability to make strategic life choices acquire such an ability” She also described three components of empowerment which are resources (human, social and capital) the second component is agency (ability to define and work on one’s shared or individual goals) and the last one is achievements (outcomes- well-being). These three components are inter- related resources facilities agency which primes to achievements and then achievements can contribute to resources ((Meinzen-Dick *et al.* 2019). Women empowerment contribute as a vital instrument eradicate the poverty, reducing hunger and contribute towards the gender equality. In order to achieve the distance dream of stronger economies, enhanced quality of life for both sexes, communities, and internationally established goals of sustainable development. It is principally, important and central to empower women across all sectors including economies (UN Women, 2011). Women empowerment is considering very significant to eliminating the gender differences and vindicating the negative outcomes whether in education, health, economic output or agricultural

productivity (Meinzen-Dick *et al.*, 2019). The empowerment of women is considered as ‘precondition’ in order to achieve food security globally. However, diverse gender systems are nuanced. The essence and degree of gender discrimination and the conditions required for women to be empowered differ across nations, cultures and regions (Akhter *et al.*, 2018).

A great deal of diversity can be found in Pakistan across its different provinces and regions in culture, customs, behaviors, and practices, however, similarities are there as well. Thus, when the wide-ranging term of “Women in Agriculture” is used, the gigantic and assorted role performed by women in agriculture in one province, or slightly restricted more precise in other regions or provinces. The change in geographic area also change the role and responsibilities of women. Food and nutrition practices, gender roles vary across different areas, ecological zone as well as ethnic groups (FAO, 2015). Globally women role in agriculture is recognized for its overwhelming contribution in food security and economy boost. According to Food and Agriculture Organization more than fifty percent of worlds food produced by women (FAO, 2011). In developing nations women comprise almost 43 percent of labour in agriculture sector (Doss, 2014). However, literature shows the gender gap in education, assets ownership, extension services, access to

credit all, regulating access to property, institutionalizing discrimination these factors in combine make women less productive in agricultural sector (Quisumbing, 1996; World Bank, Doss, 2001; 2001; FAO, 2011; Quisumbing *et al.*, 2014). Despite, these hinders women from all over the world making their ways into agriculture according to Bangladesh Bureau Statistics women encompassed 40 % of total agriculture labor force, with increase of 7 % between 2005 and 2010 (BBS, 2011).

The share of female in agriculture can also be seen in other Asian nations such as in Nepal women segment in agriculture employment was 35% in 1980 and it reached at 50% in 2010. Iran also show increasing patterns in where women share grew from 25% to 50% between 1980 to 2010. In Pakistan where it was a scanty 12% in 1980 but loomed almost 30% in 2010 (Slavchevska *et al.*, 2016). Women dominate numerically the agriculture sector in Pakistan 59.9 % women in agriculture sector utilized more hours in agriculture related activities, that is 50 hours per week, while this proportion is only 26.6% as compared to male members. Despite, of their contribution in terms of input, mean monthly pay for women is PKR (6,345) which is considerably low as compare to male laborer (PBS, 2014). Regardless of women's high inputs, the mean wage for women for is quiet less than that of men (PKR 9,441) (GOP, 2015). Women's participation is severely excretion by familial, financial and political matters directly because of patriarchy and ethnic values, forcibly confronted the role of Muslim women in society. Employment, political, recreation and education are in Pakistan societies mostly the domains of men (Khan *et al.*, 2013). Women's are most disadvantage at household level due to feudalism, cross-cousin marriages and the strong Islamic ideology of female solitude (Sathar and Kazi, 2000).

The Women's Empowerment in Agriculture Index (WEAI): WEAI is an index which is survey based deliberate to measure agency, empowerment and women inclusion in agriculture subdivision. Initially it was designed as a tool to reflect women's empowerment. WEAI encompasses two sub-indexes. The initial one directly captures the proportion of empowered women among those women who are not fully empowered by using five domain of empowerment (5DE) in agriculture. It also mirrors the gages in which women adore satisfactory attainments. The five domains in index comprise are access to and decision-making, decisions about agricultural production, control of use of income, power about productive resources, time allocation and leadership in the community. The second part of the index (sub-index) which measures gender equality is Gender Parity index (GPI). GPI mirrors the women's who are disempowered or surpasses that of men in their respective household. And the households who have not attained Gender Parity reflects the empowerment gap which needs to be bolted in order to reach the same level as of men (Alkire *et al.*, 2013).

Significance of study: The phenomena of gender-gap in Pakistan can be appraise through a number of facts regarding from ethnographic discrimination to legal disparities, economics inequalities and normative cultural attitudes. Ground facts present very grim state of gender disparities as nation holds one of the lowest rank in internationally devised indicators of gender and associated arena. Pakistan stood on gender related profile as country stands 130 out of the 159 nations with the value of 0.546 in gender inequality index (GII) in the year 2015 (HRD, 2015). The world economic forum categories Pakistan on second last position which is 144 in gender gap index (WEF, 2018) the report of UNDP ranked Pakistan 130 out of 148 in gender inequality index among the worst place for women in the world (UNDP, 2017). On the other hand, Agriculture is the backbone of Pakistan economy. It's contributed 19.8 % to the GDP and consumed 42.3 % of total work force. More than 66 % of the country population depends on this sector for their livelihood; no doubt this sector has great potential for growth and development (GOP 2016-17). Women role in agriculture is recognized globally due to their share in agriculture and food production. In an agricultural country such as Pakistan where more than 72.7 % of female labor force is engaged in agriculture and its allied sectors their role is even more pronounced (PBS, 2015). In this context, Kausar and Ahmad (2005) stated that women have a more prominent role in crop production, protection, marketing and livestock management than the men. Though, millions of women workers are landless, yet their role in agricultural development is significant. Despite all these contributions, however, the access of women to productive resources and services is limited and the problems they are facing are enormous (Khan *et al.*, 2015). These problems/constraints (economic, social, cultural) are not only affecting the quality of life of women but also the overall rural development process. There is a dire need to recognize the importance of women in agriculture sector.

Basically, this study deals with the phenomena of obstacles and constraints faced by women that hinders women empowerment. It assessed the women empowerment in rural areas of Punjab, Pakistan through women empowerment in agriculture index (WEAI). More specifically, this research:

- Measures respondents' level of empowerment by using five domains of empowerment (i.e., production, resources, income, leadership and time)
- Measures the relative inequality between the adult male and female in selected households by using Gender Parity Index.

MATERIALS AND METHODS

Current research was conducted in the rural areas Punjab, Pakistan. This study used triangulation research (i.e., both qualitative and quantitative) to get the broader and clearer

picture of women empowerment in agriculture by using (WEAI) index. Primary data collected through WEAI. The study was carried out in the rural areas of Punjab, Pakistan. Province of Punjab has different regions (i.e., Central, Southern and North Punjab) every regions has its own distinguished cultural patterns that have board spectrum impact on women empowerment and its accompanying relations multistage sampling methodology was used in the collection of data. The research area consisted of three districts from Punjab province. Three districts from each region of the Punjab was selected through simple random sampling techniques. One Tehsil was selected from every district and then four villages were randomly selected from chosen Tehsil. Data for this study were collected from 300 households. Men and women both who are working in agriculture sector were the respondents. This made a total sample of 588 respondents (12 households were female headed only). Data was gathered through a series interviews. Empirical analysis for this research was conducted through WEAI is proposed to be measured in two components 5DE and GPI. The variables measure by 5DE (a) women contribution in household decision making, income generation and production activities (b) access to productive capital (c) leadership, community influence, group participation (d) women's time allocation. (e) women's decision making. The equation used to calculate 5DE is $5DE = He + Hd(Ae)$

Where He is the proportion of women who are empowered, Hd is disempowered women's percentage, and Ae is the mean total empowerment score among disempowered.

The Gender Parity index is a comparative inequality measure that mirrors the disparity in five domains of empowerment profiles among the adult men and women in the household (Alkire *et al.*, 2013). GPI is calculated as $GPI = (1 - HGPI) \times IGPI$

Where (HGPI) percentage of women without gender equality, percentage of women with gender equality (1-HGPI) and Mean Empowerment Gap (IGPI)

RESULTS AND DISCUSSION

Data were collected from the rural households. The respondents were asked to indicate their demographic characteristics. The responses in this regard are given in Table 1.

Table 1 show the average age of household head for women and men, the average age for women is 39.9 and 43.3 years respectively. These results are accord with (Das, 2016) who conducted an empirical research on development of women empowerment index for the Indian Apparel industry, described that average age of women is 38.06 years. The mean population growth rate of Pakistan is 2.40% between the years of 1998-2017 and total fertility rate is 2.55 children per women (Pakistan Bureau of Statistics, 2017). In the present study average household size was found to be 7.28 and number of children was found 2.7 on average per women. According to Government of Pakistan the average family size is 5-6 persons (GOP, 2015). Children are considered in Pakistan as protection of parents in the older age. Also desire of son can be a major reason of high fertility rate in less developed areas. The difference in results in the study areas than national statistics is defensible by the fact that the sample is taken from rural areas of Punjab, Pakistan where households have more children's. Unfortunately, the literacy rate of women especially in rural areas is very poor 44% for females and 66% for males. The results are in line with the present study. The reason behind the low level of education could be cultural constraints. On average a household have 3.51 livestock units. The average landholding in the study area was 4.30 acre.

Figure 1 shows the contribution of 5DE towards women disempowerment. The domains that fund maximum to women's disempowerment in all three districts of Punjab are resource and income The questions which were asked related to role in household decision-making around production and in come generation, decision- making around agricultural

Table 1. Background information of the sample households

Variables	Women					Men				
	n	mean	SD	Min	Max	n	mean	SD	Min	Max
Age of the respondent	300	39.90	9.97	20.0	75	288	43.30	9.79	25	75
Earning members	-	2.27	1.71	1.0	15	-	2.27	1.71	1	15
Family size	-	7.28	3.37	1.0	24	-	7.28	3.37	1	24
No. of children	-	2.70	2.60	0.0	15	-	2.70	2.60	0	15
Years of schooling	-	4.10	3.20	0.0	16	-	4.10	3.20	0	16
Agri. Land own	-	4.30	10.60	0.0	120	-	4.30	10.60	0	120
Livestock units	-	3.51	3.71	0.3	23	-				
Female headed HH						12				
Female and male headed HH						588				

Table 2. Regional comparison of women empowerment in agriculture using WEAI

Induces	Jhang		D.G Khan		Chakwal	
	Women	Men	Women	Men	Women	Men
Disempowered Headcount (Hn)	56.7%	51.5%	58.9%	53.4%	55.7%	52.1%
Empowered Headcount (He)	43.3%	48.5%	41.1%	26.7%	43.3%	39.9%
Average Inadequacy Score (An)	56.5%	41.2%	62.5%	41.4%	44.2%	41.1%
Average Adequacy Score (Aa)	43.5%	60.8%	37.5%	59.6%	55.8 %	58.9%
5DE Index [He+ (Hn* Aa)]	0.689	0.598	0.498	0.398	0.745	0.395
Percent of women with no gender parity (HGPI)	51.8%	61.9%	55.4%			
Percent of women with gender parity (HWGP)	48.2%	38.1%	44.6%			
Average Empowerment Gap (IGPI)	26.9%	36.9%	53.8%			
GPI [1-(HGPI* IGPI)]	0.686	0.782	0.598			
WEAI= 0.9x5DE +0.1xGPI	0.034		0.578		0.784	

production and access to productive capital and results showed that income and resources contribute to women disempowerment 23%, Production 20% and weak leadership 19%, and time 15%. The findings depict that the control over income and resources plays an important part in contribution towards women empowerment. Patriarchy and sociocultural constraints limit access of women to income and resources. According to World bank (Findex, 2017) only 21% of the adult population in Pakistan is part of financial institutions and in which 89% were men and overwhelming majority reside in Urban areas. In Pakistan all resources are held by men of the family and women are the dependent one. Their dependence on men make them disempower. These findings are in line with Bangladesh and FTF zone where the contribution of resource domain towards disempowerment of women were 23.6 and 22.4% respectively (Sraboni *et al.*, 2013).

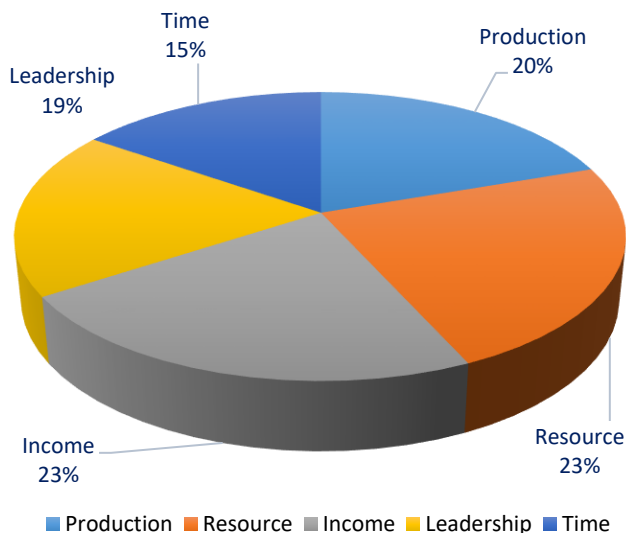
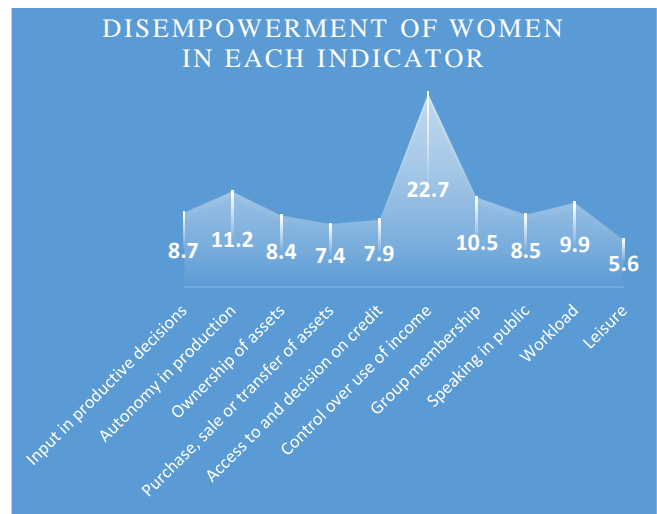
Disempowerment of women in 5DE**Figure 1. Contribution of each of the 5DE towards disempowerment of women.****Figure 2. Contribution of each 10 indicators of the 5DE towards the disempowerment of women**

Figure 2. Five domain of empowerment which are used in women empowerment in agriculture index have ten indicators which contribute towards the empowerment or disempowerment of the women in this figure shows the domains indicators and their contribution towards women disempowerment. The domain that contributes maximum towards disempowerment is control over use of income with 22.7%, autonomy in production 11.2%, lack of participation in groups 10.5%, workload 9.9% input in productive decisions 8.7%. Pakistan comes under the patriarchy belt the socio-cultural factors hinders women empowerment. Especially, in rural areas women are not allowed to have access or control over income and resources such as agriculture and non- agriculture land. Moreover, there is no say in household decision making, unbearable workload making them more disempower. These results are similar to (Das, 2016) where control over income indicator contribute to disempowerment is 23.7%, lack of participation in groups contributes 14.6%, workload 8.3%.

The WEAI results for the Central Punjab (Jhang) is 0.034. The average weighted score of the sub-index 5DE value of 0.689 and the GPI sub-index value of 0.686. Findings for South Punjab (D.G. Khan) is 0.578. The weighted score of the sub-index 5DE value of 0.498 and the sub-index value GPI of 0.782. WEAI results for North Punjab (Chakwal) is 0.784 and the average weighted score of the sub-index 5DE value of 0.745 and the sub-index GPI value of 0.598. The findings indicate the women who are empowered in five domains are less than half. The women who are disempowered in Central Punjab marked, on middling, satisfactory achievements in 43.5% of the domains. Therefore, the total 5DE for women is $43.3\% + (56.7\% \times 43.5\%) = 0.689$. The women who are not yet empowered in the South Punjab still have, on middling, satisfactory achievements in 37.5% of the domains. And the total 5DE for women is $41.1\% + (58.9\% \times 37.5\%) = 0.498$. Women who are not empowered in North Punjab still have, on middling, satisfactory achievements in 55.8% of the domains. The total 5DE for women in North Punjab is $43.3\% + (55.7\% \times 55.8\%) = 0.745$. Meanwhile, women who have gender parity with the male within the same household are in Central Punjab 48.2%, South Punjab 38.1% and in north Punjab is 44.6 percent. The gender parity is relatively significant in South Punjab. The women with no gender parity, in the all three regions are 51.8%, 61.9, 55.4% in Central, South and North Punjab respectively. The empowerment breach among men and women within household is relatively substantial at 26.9 and 36.9% in Central and South Punjab but less significant in North Punjab at 53.8%. Thus, the overall GPI in the all three regions are 0.034, 0.578, and 0.786 in Central, South and North Punjab respectively.

Table 3. Gender Parity Index

Measure	Values
% of Women with no gender parity	59.5%
Mean empowerment gap	27.08%
GPI	0.782
No. of women in dual households	288 (12 households in the sample were only female headed)

Gender Parity Index: The above table show the value of GPI derivative from the sample. The GPI score of the 288 women who were living in the household with the male members of the family depict, the percentage of the women with no gender equality with the adult male in the household is 59.5%. Within the same household the mean empowerment gap among male and females in the household was 27.08%. The calculated GPI for the present study was .782.

Pakistan ranked at 151 out of 153 countries with the score 0.563 in Global Gender Parity Index report 2020. Pakistan slipped 3 rank down in 2020 (WEF 2020). The other South Asian nations in the index Pakistan ranked at the bottommost the ranking of other countries are 50, 101, 102, 112, 123 and

131 for Bangladesh, Nepal, Sri Lanka, India, Maldives and Bhutan respectively. Household dynamics of men and women within the household measure by gender parity, the results are in line with Feed the Future zone (FTF is global food security and hunger program funded by US government to address the root cause of poverty, undernutrition and hunger by supporting country driven) where the GPI score was .797 while in consistent with Bangladesh, Ghana and Kenya where the GPI score was .80, .81 and .81 respectively (Malapit *et al.*, 2014). Different regions and different social structure might be the reason behind the variation in the findings.

Conclusion: Women empowerment in agriculture index was used to measure the women agency, empowerment/ disempowerment in agriculture. The overall condition of women is not appreciable in rural Punjab. According to the index used in the study a significant number of women found disempowered in 5DE sub-index of WEAI. Also a large number of men found disempowered in some of the domains of the index. The percentage of the disempowerment is varied according to the indicators but the women remained more disempowered in each domain. This state can be explicated through the fact that Pakistan is a patriarchy country and all the power is in the hands of male members of the family. Women hold no bargaining power at household, no economic power, dependency on men of the household all these factor contribute towards her disempowerment. The women empowerment also found spatially sensitive in all three different regions of Punjab. The women in South Punjab was more disempowered followed by Central and North Punjab. The variation in the empowerment status is due to the regional differences the most remote and less developed area of Punjab is Southern Punjab, on the other hand women's in North Punjab on average are more independent.

The results for the sub-index gender parity also not satisfactory as more than half of the women felt gender parity within the household with the primary male adult in the household. Hence, it is concluded that the condition of women is not satisfactory in comparison to men in the same household. Regional based demarcation supported by numerical evidence, urge the specific policy formation for each region. Recognition and documentation of women work in agriculture and its allied activities, provision of agriculture extension services, social protection, women rights advocacy are the major steps that government should take to ensure women empowerment and mainstreaming.

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[Received 02 Dec 2020; Accepted 09 Feb. 2021; Published (online) 25 Jun 2021]