

Role Of Women's Empowerment In Achieving Sustainable Development Goals: Empirical Evidence From Central Punjab-Pakistan

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Abstract

Sustainable development is a way to structure a society in order to ensure its survival over the long haul. The 2030 Agenda for Sustainable Development cannot be achieved without empowering women. This research aims to quantify the impact of women's empowerment on SDG achievement in Pakistan's Central Punja. Primary data was collected from 257 female participants with the prevalence rate of female literacy in District Shekhupura through a well-structured questionnaire using the Multi-Stage Cluster Sampling technique. A Polychoric Principal Component Analysis (PPCA) used to build the Sustainable Economic Development Index (SEDI) in light of the SDGs. Using principal component analysis (PPCA), we calculate the Cumulative Women's Empowerment Index (CWEMI). The effect of CWEMI was studied using the Ordinary Least Squares (OLS) technique. SEDI is significantly influenced by CWEMI, respondent education and technology, and unpaid domestic care work

and the number of children. The impact of different types of women's empowerment on Central Punjab's SED was also investigated using OLS as well. The Sustainable Development in Central Punjab is positively impacted by three of the six dimensions of empowerment: economic and psychological. Training women in rural areas of Central Punjab with marketable skills and setting up microcredit institutions to provide small loans to women will improve the economic standing of women and their families. Combating climate change and ensuring successful grassroots management and preparation for future generations from a young age requires a shift in the culture's perception of women's roles and increasing women's environmental awareness in Central Punjab. Central Punjab Region.

KeyWords: Women Empowerment, Determinant Factors, Polychoric Principle Component Analysis, Cumulative Women Empowerment Index

1. Introduction

Women have fewer options for entering the workforce, make less money than men do for comparable work, and are more likely to live in poverty (Holshue, DeBolt et al. 2020). When compared to men, women spend roughly 50% less time in the market and nearly twice as much time on activities such as homework and childcare (Herrlinger, Tzaridis et al. 2019). In many countries, women still cannot own property, run a business, or travel without their husband's permission. Twenty-one of the 63 countries analysed by (Htun and Weldon 2011) have gender-based inheritance disparities. Implicit in gender inequalities is the significant cost to them, their families, and their countries (Klasen and Santos Silva, 2018).

Women and girls will benefit greatly from the restoration of gender equality in terms of both health and independence (Lange, Wodon et al. 2018). Because of this, they will be able to provide for their loved

ones and communities and contribute to the economic development of their respective countries. As a result, the demographic dividend and its associated benefits will be realised, along with a decrease in mortality rates in overpopulated countries and a decrease in the rates of infant mortality and childhood stunting (Wodon and De La Briere, 2018). Goal 5 of the Sustainable Development Goals is dedicated to achieving gender equality, which is widely acknowledged as essential to the success of the SDGs as a whole (Kumar, Stecher et al. 2018). One can deduce that resources, organisation, and accomplishments are the three pillars upon which empowerment rests (Ng, Fleming, et al. 2014). The acquisition of skills, care, and knowledge is just as crucial as the acquisition of material resources like money, land, buildings, etc. in fostering greater autonomy.

Resources, structure, and success are the three pillars upon which empowerment rests (Ng, Fleming, et al. 2014) There is a two-way relationship between economic growth and women's empowerment, with the latter defined as an increase in women's access to the economic, political, and social institutions that are essential to progress (Banerjee, Chandrasekhar, et al. 2013). Gender inequality can be greatly reduced with the help of development. Without anything else, development can play a crucial part. Empowerment, then, can hasten development. Numerous studies have shown that the country cannot reach its sustainable development goals unless women are given equal opportunities to participate in the economy, society, politics, and the environment. In particular, sustainable development is a way to structure a society in order to ensure its survival over the long haul. This necessitates thinking ahead to future needs like social and economic justice and the preservation of natural resources. After women's emancipation (Bayeh, 2016), sustainable growth becomes highly unlikely.

Economic growth is dependent on a number of factors, but empowering women is a task in and of itself (Tubanova, Fedosov, et

al. 2018). In Pakistan, the role of a woman as a child-bearing partner is widely regarded as patriarchal (DehghanSh, Eslamian et al. 2017). Pakistan It is typically the husband or the elderly who make important household decisions. This conception of women's roles not only shapes individual identities (gender), but also those of their communities and peoples (ethnicity, race, etc.). Women's labour force participation in Pakistan is at a dismal 24.80 percent; maternal mortality is extremely high; and women face oppression and discrimination in every sphere of society (USA. 2008). According to the 2014 Global Gender Gap Report, Pakistan is ranked 141st out of 142 countries, dead last. The survey found a gender gap of 44.78 percent across the board. In terms of health, education attainment, economic participation, and policy control, the average gender gap is 3.34 percent, 19.46 percent, 69.0 percent, and 87.27 percent, respectively (Schwab and Sala-i-Martin, 2016).

Furthermore, Pakistan is ranked 123rd out of 148 countries on the 2012 Gender Inequality index (De Beukelaer, 2014). Not only is there a gender gap, but there is also a gap between women of different regions. The ratio of women to men is found to be 25.7, while the percentage of men in the labour force is 85.7. Women outnumbered men 69% to 74% in primary school enrollment but made up only 3% of upper-level executive, legislative, and managerial positions. Two-and-a-half times as many men as women hold positions of professional and technical employment, with the ratio being 0.28 to 1. With only 20.6% of parliamentarians being women compared to 79.4% men and 0.26 % men, Pakistan ranks at position #95 on the policy equality index (Favre, Pagani et al. 2017). Because of this, research into the effects of empowering women on economic growth and stability can be justified.

The United Nations Report on Gender Equality highlights Pakistan as one of the four countries to be addressed in its Sustainable Development Agenda 2030. The report painted a bleak picture of the

country, finding widespread oppression of women. Twelve percent of Pakistani women aged 18 to 49 (4.9 million) are currently deprived in four sustainable development goals linked dimensions including education, child marriage, health care, and employment. When compared to Saudi Arabia, Yemen, and Egypt, Pakistan has one of the worst marginal positions for women among the four Muslim countries.

Unfortunately, Pakistan is not making any progress toward the SDGs. Since Pakistan is unable to promote gender equality and ignores the thoughts and ideas of roughly half of its population, its economic growth is stunted. If Pakistan's female labour force participation rate is the same as that of men's, the country's GDP is expected to grow by about a third, as stated in a report by the International Monetary Fund. The claim that promoting gender equality leads to higher economic growth is backed up by a fair amount of evidence ((Bardhan and Klasen 1999); (Esteve-Volart 2000); (Forbes 2000); (Esteve-Volart, 2004); (Kabeer 2012)). Empowerment and progress go hand in hand; the two go hand in hand (Boselli, Breilh et al., 2003). Generally speaking, the proportion of income spent on food and education rises in households where women own more assets (such as land, savings, and businesses). However, sustainable economic development not only boosts GDP, but also reduces waste, pollution, cultural upheaval, and political unrest. Economic growth, social progress, and gender equality are all bolstered when women's rights are upheld. Therefore, the purpose of the present study is to perform the kind of analysis that has rarely been done before in sustainable development studies: to examine the role of women's empowerment. The focus should be on closing the gender gap in female participation.

Having more women actively participate in the economy is a huge step toward achieving long-term economic stability and broad prosperity for all. Filling in the blanks on the empirical role of women's empowerment and its many facets in the pursuit of

sustainable development goals is essential to getting a handle on this item. This is made easier by the fact that there is surprisingly little research conducted on the topic in the context of Pakistan. As a result, it is crucial to structure such important studies. developing a regional sustainable economic development index (SEDI) is more challenging than a national sustainable development index. Therefore, the development of the sustainable economic development index for Central Punjab and analysis of women empowerment in accomplishing this task, which is indispensable for inter and intra-generational equity, will be great essential addition of the present research. The study aimed to develop a central Punjab-specific cumulative index of women's empowerment and sustainable economic development index given Sustainable Development Goals (SDG, s) (SDG, s). For the purpose of studying is to examine how various forms of women's empowerment affect long-term financial growth in Central Punjab, Pakistan. So, an empirical study tried to identify the key dimensions and determinants for empowering women has great significance because policy makers and funding agencies will make policies in right direction for accelerating development process and help in achieving post 2015 development agenda.

2. Literature Review

Researchers in a number of fields have defined empowerment not as an end but as a means (Akhter and Ward 2009; Kabeer et al. 2011). The preponderance of men in society is often ignored in studies of women's empowerment (Wieringa 1994; Elson 1999). Leveraging a broader understanding of the term "empowerment" Women's empowerment, according to the process and agency approach (Al-Dajani, 2007), is not a linear process but rather a cycle that involves dynamic capabilities to restrain alternative choices, decisions, and actions (Jabre et al. 1997). One helpful definition comes from Kabeer (2001): "the expansion in people's ability to make strategic life choices in a context where this ability was previously denied to

them." Many investigations into the causes and consequences of women's empowerment have been conducted. In this section, we provide a high-level summary of a few chosen research projects.

The purpose of Chaudhry & Nosheen's (2009) research is to try to identify the most important factors that contribute to women's empowerment in far-flung regions of Pakistan. Personal autonomy, family decision making, economic consultation, and political autonomy all contribute to the overall women's empowerment index. Important determinants include women's education, access to the media, societal norms, women's work status and household participation, and familiarity with an Islamic Concept of Women Empowerment.

According to Khan et al. (2010), women's empowerment is largely attributable to their increased access to economic opportunities, political representation, and formal education. Empirical research conducted by Varghese (2011) in Oman used women's economic and household decision-making power and freedom of movement as indicators of empowerment. The level of empowerment is determined by factors such as income, education, employment, and accumulation of assets; however, media exposure is found to have a negligible effect.

In their 2012 study, Zaman et al. aimed to assess women's agency in a cross-section of Bangladesh's urban and rural communities. The ability to make decisions at home was seen as a proxy for women's empowerment. Based on the results of a bivariate analysis, women who are more financially independent are more likely to live in pacca houses, have fewer children, and be employed outside the home.

Awan and Zertashia (2015) used a random sampling technique on primary data to investigate what factors lead to women's empowerment in underdeveloped and far-flung places like D.G. Khan. Women's empowerment is influenced both positively and

negatively by factors like the fear of violence and the joint family system, as well as factors like women's access to the media and their own bank accounts. Dey and Khudri (2015) use principal component analysis (PCA) to assess women's agency by constructing two indices: one for women's responses to domestic violence, and another for their participation in household decision-making. The findings showed that educated women are more likely to speak out against physical violence than their less-educated counterparts.

In the Guduru district of Orania regional state, Dadi (2017) has identified the factors that contribute to rural women's economic empowerment. Results showed that economic empowerment of rural women was significantly influenced by women's access to information, women's participation in decision making, women's freedom of movement, institutional factors, and women's participation in organisations. In southern Punjab, Pakistan, Abrar-ul-haq et al. (2017) used principal component analysis with six variables related to decision making to create a women's empowerment index. Many factors were identified as contributors to women's empowerment, including socioeconomic status, family structure, and women's education.

Women's independence was measured by Akram (2018) in terms of their ability to make decisions about their homes and finances, as well as their children's health care and social interactions with extended family and friends.

Women's empowerment factors were evaluated by Batool (2019) and found to have varying degrees of strength at the individual, social, and family levels. Individual factors included her employment status, income, sense of control, ownership of property, knowledge of the law, sense of self-worth, and understanding of her gender; family level factors included her conjugal age, husband's support, and status as family head; and social/cultural factors included her use of a mobile phone. Individual-level factors were found to be the most

significant enabling factors of women's empowerment in the patriarchal culture of Pakistan, according to the study.

Numerous studies have pinpointed various factors that contribute to women's empowerment, as evidenced by the research that has been published on the topic. Important capabilities of women that are significant enabling factors in achieving this effective instrument of household and social welfare are also taken into account in the present study, along with other socioeconomic, demographic, and political variables. Consequently, demographic, social, economic, and political factors were tested in addition to women's communication behaviour, awareness of a recently enacted women's protection bill, unpaid domestic care work, and the sustainable development indicator of a clean and safe environment. Even though women's empowerment is a critical variable in achieving the post-2015 development agenda, there has been no study to date that takes into account all of these factors together.

In Pakistan, research on women's empowerment has lagged behind other areas. Most prior research relied on secondary sources of information. Various studies measured women's agency on a variety of scales. No previous research has attempted to create such an all-encompassing index of women's empowerment, which would include their participation in decision-making at home (both in terms of routine activities and larger economic matters), their access to formal financial institutions and saving mechanisms, their ability to advance in their careers and communities, and their psychological, social, and political autonomy. The method, known as polychoric principle component analysis (best suited for ordinal categorical variables, Kolenikov and Angeles, 2004 and 2009), has not been applied to the development of any studies. such a cumulative index of women's empowerment at the household level.

3. Data and Research Methodology

3.1 Data Source and sampling technique

Present study based on primary source of data. A detailed questionnaire was developed for data collection. The targeted respondents of this study are only married women of age (17-50) years (Mean=31.30, SD=7.972). The cronbac alpha value of questionnaire was (0.727). A multi stage cluster sampling technique has been used for data collection from district Sheikhpura. Sheikhpura has been selected from Central Punjab on the basis of an average district on the prevalence rate of female literacy rate. The total sample of 257 is determined by with the following statistical formula, $Z^2 \frac{\hat{p}(1-\hat{p})}{n}$ Where $\hat{p} = Q (1-Q)$ where **Q** shows the value of prevalence rate (female literacy rate). Number of households selected from clusters proportionate to rural urban proportion of 2017 census i. e is 97 and 160 for urban and rural areas respectively. Sample households are selected on the next stage from clusters on the basis of quotient rule with random start. The detailed household lists of clusters were obtained from BOS.

3.2 Data and Variables

3.2.2 Cumulative Women Empowerment Index (CWEI): The Dependent Variable

Cumulative women empowerment index (CWEI) was constructed by combining six dimensions i.e decisions making, socio-cultural mobility, familial/interpersonal empowerment, economic empowerment, political empowerment and psychological empowerment with 28 variables to get a comprehensive and complete idea of women empowerment. Statistical association of variables in each dimension has been checked through Kendall tau b rank correlation. Polychoric principal component analysis (PCA) with orthogonal varimax (Kaiser off) was

performed to develop CWEI which is suggested best method for
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dimensionality reduction of categorical variables (Kolenikov and Angeles, 2004, 2009).

PCA can be applied when all the variables are numeric (i.e the variables are either quantitative or continuous) and the relationships among variables is linear (Gifi, 1990 and Kamanou, 2005). Variables in our dataset are categorical, measured at ordinal and nominal level. So, classical PCA would not be the most suitable technique. Ordinal variables do not have an origin or a unit of measurement and therefore means, variances and co-variances have no real meaning estimating the co-variance (correlation) matrix, the standard PCA is no longer the appropriate methodology.

The retained six components provide a summary measure of each dimension of women empowerment by extracting common information captured by single indicators, avoiding redundancy and minimizing statistical biases. Weighted sum of the components where weights are obtained by dividing loadings with the square root of eigen value i.e variance explained by each component in polychoric principal component analysis, has been considered as the cumulative index of women empowerment in district Bahawalnagar of Southern Punjab. Scores for each component are calculated by multiplying the variables with appropriate weights obtained through polychoric PCA.

CWEI=HHD+SEM+EEM+POLEM+FAMEM+PSYEM

Where, HHD: Household Decision making, SEMI: Social Mobility, EEM: Economic Empowerment, POLEM: Political empowerment, FAMEM: Familial empowerment, PSYEM: Psychological Empowerment.

3.2.3 Impact of Women Empowerment on Sustainable Economic Development for Central Punjab

There are various socio-economic, demographic and political

variables that explain changes in response variable women empowerment. Present study also aims to identify the key determinants for empowering women. selected variables description is given below.

Table 2: List of Selected Variables for Empirical Estimates

Variables	Description of variables
Dependent variable	
CWEI	Cumulative women empowerment index (calculated by six dimensions of women empowerment from questions in questionnaire)
Independent Variables	
NCHLD	Number of children of respondent
FEDU	Female Number of Years of schooling completed
MEDU	Husband Number of Years of Schooling completed
UPCW	Time spent in Unpaid domestic care work
A.Tech.	Adoption of Technology by the Respondent
AH PA	Access of Household Physical Assets
NCHLD	It is number of children of respondent
FEDU	Female Number of Years of schooling completed
MEDU	Husband Number of Years of Schooling completed
UPCW	Time spent in Unpaid domestic care work

3.3 Methodology for Empirical Analysis

In order to determine the women empowerment, socio economic and demographic, political and individual determinants for sustainable development Index, ordinary least square regression model is used in this study.

$$Y_i = \gamma_0 + \gamma_i X_i + \varepsilon_i \text{ -----1}$$

The dependent variable Y_i is Sustainable Development Index, X_i shows explanatory variables, ε_i is error term and γ_i shows parameters of current model, the ordinary least square regression model is given as:

$$SDI = \gamma_0 + \gamma_1 CWEMI + \gamma_2 REDU + \gamma_3 RHEDU + \gamma_4 NCHLD + \gamma_5 TECH + \gamma_6 HPAS + \gamma_7 UPCW + \varepsilon \text{ -----}$$

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All the analysis was accomplished by using Stata version 13.

4. Results and Discussion

4.1. Impact of Women Empowerment on Sustainable Economic Development in Central Punjab

Increased human capital capacity is important for sustainable development. It acknowledges that any initiative towards improving human capital must be based on the concept of equality as a signatory to 2030's Sustainable Development Agenda. Women constitute nearly half of our population and so any progress that it makes depends on extending the same opportunities to every individual.

In the economic sphere, gender differences not only affect women's well-being, but also have a negative effect on both household and society and on the economy generally. Enhancing women's economic empowerment is therefore not simply a goal; in some respects it is a precondition for reducing inequality in other aspects of the lives of women. Sheikhpura is comparatively advanced in the state, and is closer to the capital city of Punjab, central Punjab district. It's an industrial town with women who have more economic influence. Women's empowerment is central to sustainable economic growth. But how much do these women empowered affect sustainability? In the previous section, this question was answered. The correlations of the variables were firstly analysed and followed by regression analyses in determining the impact of women's empowerment on Central Punjab's sustainable economic development. The study is defined in detail as below.

4.2. Correlation Analysis

A coefficient of association is a mathematical evaluation that tests the path and influence of this propensity to differ. Table 7.6 presents a correlation analysis between the Sustainable Development Index and women empowerment with other factors for Central Punjab. The positive correlation have been found among sustainable economic development, empowerment for women, education of respondents, education for the respondents husband, the assets and adoption of technology. While negative correlation was found in women unpaid care work and number of children with sustainable development, women empowerment, female education, husband' education, technology, and household assets.

Without the participation of women, economic development is inevitable as one element of sustainable development (Solomon and Memar 2014, OECD, 2008). The positive correlation shows that women's empowerment is growing and contributes to sustainable development. Greater equality between men and women promotes economic growth and leads to better results for progress. It helps reduce revenue

inequalities and promotes economic diversification, while at the same time supporting economic resilience (IMF 2018). A important area of research in international development is the socio-economic influence of female education. Rising women's education levels in regions tend to be linked with high development levels (Perez-Felkner et al. 2020). Some of the results are linked to economic growth. Education for women increases women's incomes and results in GDP growth. Social development is also linked to other results. Girls' education has a range of social benefits, many of them linked to empowerment of women (Ahmed and Hyndman-Rizk, 2020). Similarly, access for women to economic assets (i.e. physical or financial assets) is a key component of the strategies to reduce poverty and to encourage women in society's economic development. It is argued that promoting early access for women to economic assets improves their chances to escape poverty and enhances their capacity to take part in adult economic growth (Dickson and Bangpan 2012).

The number of children, however, has a negative correlation between sustainable economic growth, education to respondents, husband of respondent education, women's property and technological progress. Population are one of the key factors in economic growth and their growth speed determines their scale.. Weil (2013) questions the relationship between rapid population growth and poverty, stating that “rapid population growth causes a country to be poor, that something about being poor leads to rapid population growth, or that causality runs in both directions” (p.103). More children are hampering women's empowerment, sustainable economic development and education.

The values of all the factors (< 0.80) as shown in Table 3 are indicating that there is no multicollinearity problem in the model for Central Punjab.

Table 3: Correlation Analysis

Variab les	SED ISP	CWE MI _{SP}	RHE DU	RE DU	TE CH	HPA ST	UPC W	NCH LD
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SEDI _S P	1.00							
CWE MI _{SP}	0.28 *	1.00						
RHED U	0.35 *	0.12*	1.00					
REDU	0.38 *	0.08*	0.64*	1.00				
TECH	0.42 *	0.18*	0.41*	0.45 *	1.00			
HPAS T	0.17 *	0.12*	0.16*	0.17 *	0.18 *	1.00		
UPCW	-0.27 *	-0.48*	- 0.06*	- 0.02 *	- 0.13 *	- 0.07 *	1.00	
NCHL D	- 0.20 *	0.14*	- 0.35*	- 0.29 *	- 0.04 *	- 0.08 *	- 0.06	1.00

Source: Author's own Calculations

4.3. Regression Results of Impact of Women Empowerment on Sustainable Economic Development for Central Punjab

Several development economists find higher gender inequality correlated with slower growth. Amartya Sen (1990) estimated a large number of 'missing women,' resulting in skewed sex ratios, arguing that this was one of the primary growth obstacles in history. With numerous co-authors, Stephan Klasen used macroeconomic regression to demonstrate that gender inequality has generally been correlated with lower GDP growth in developed countries over the past few decades (Klasen and Lamanna 2009, Gruen and Klasen 2008).

Empowering women can be a significant economic benefit for any country. For example, if women were to be working to the same degree

as men, national income would rise by 5% in the USA, 9% in Japan and 27% in India (IMF, 2013). Fair pay and greater job prospects for women improve economic growth, generating a bigger pie for all to enjoy (Löfström, 2009). Table 7.23 's empirical finding shows that women's empowerment has important and positive impacts on Central Punjab's sustainable economic development index. One-point rise in the empowerment of women in central Punjab could increase sustainable economic development by 0.089 points. Similarly, women's empowerment would have a positive effect on both economic and sustainable economic growth (Mehra, 1997; Lutz, 2007; Volartz, 2008; Doepke and Tertilt, 2011; Duflo, 2012; Bhoganadam et al., 2014).

Education plays a crucial role in growth because its intrinsic and instrumental meaning are distinct. It has a tremendous potential as a empowering instrument for redistribution and transformation, as an important capacity that is central to the welfare of individuals and, ultimately, enlightened communities. The literacy rate of women plays an important role in improving national economic growth. The development of society is related to the success of its educational systems, which provide the same opportunities for everyone to obtain education (Parveen, 2008). Education contributes to economic growth, according to current economic theory. The traditional theory of human capital and economic growth indicates that a large portion of human capital is produced by schooling and used to manufacture goods and services (Hong, et al . 2019). The current finding, which is based on this claim, illustrates the effect on economic growth of female education. In particular, it illustrates that encouraging education for women has a huge effect on sustainable growth. The result indicates that one-year education level raises the respondent's sustainable index by 0.0213 points. This finding is consistent with findings obtained by Seguino (2010), Parasad, et al . (2011), Paul and Chang (2016). Similarly, husband education also argued to empower women. Women mostly rely on the male members of society in economic and social terms, which is why husband education is critical. If they're highly educated, they know about women's rights and trust in domestic decision-making (.Noreen, 2011). Education of the

husband is also important to consider the woman's needs and include women in decision-making and freedom of choice. In addition , education is an important method for developing new beliefs and thereby improving relationships with others.

Schultz (1985) found that the educated husband reduces infant deaths and indirectly increases economic growth. A trained husband nurtures children in the right way and makes educated and civilized children. The empirical results support that education of respondent' husband has positive effect on the sustainable economic development. It shows that an increase of one unit in husband education for women would increase 0.021 points of sustainable economic development. Similar result was found by Boyle et al. (2006) & Nowak and Dahal (2016)

It could be the most exciting transforming aspect of technology to advance women economically. Increasing women and increasing their job productivity is key to poverty reduction. Mounting evidence supports the many beneficial effects for girls, families and communities from women's improved economic status. Economic prosperity for women also encourages economic development overall. Unfortunately, technology has been underused in opening up economic opportunities for women.

Improving access for women to technology will improve their economic success and improve wider economic development (Gill, et al. 2011). Adoption of new technologies plays a crucial role in economic growth. The empirical result shows the positive impact of women's adoption of new technology on sustainable economic development. Adoption of new technology could bring the 0.461 points increase in sustainable economic development of Central Punjab. Similar result were also found by Nikulin (2016) and Patel's (1979). They concluded that ICT adoption enhances women's empowerment and can eventually boost their economic growth.

The improved status of women is seen as increasing their

educational and economic achievement and leading to higher empowerment in decision making. Increased empowerment of women is often linked to lower levels of fertility, whereas patriarchal cultural factors often involve less women's empowerment and greater fertility (Phan, 2013). Low empowerment for women leads to low economic involvement for women and low economic growth. The empirical results indicate that there are negative effects on sustainable economic development for the number of children. One child would decrease the sustainable development by 0.167 points in Central Punjab. The result is consistent with Kumar and Setti Study (2018), Schiller (2002) and Boyden (2012).

Owning property is a key factor in the status and power of a person in the household and society as a whole. The cause and consequence of the economic marginalisation of women may be unfair property possession (Najjar et al . , 2020). Dispare in access to and ownership of production resources not only prevents women from improving their families' living standards but also enhances the vulnerability of women in times of unforeseen financial and ageing crises (Hansen, et al. 2020).

Because physical assets are typically needed to secure lending from financial institutions, women's access to capital is likely to also be restricted by limited access to land and other physical capital. In addition, physical property promotes women's empowerment. More number of properties contributes to the empowerment of women. If a woman can successfully grow financially and have the authority to act and make decisions, she gains economic freedom (Golla, et al., 2011).

Domingo (2013) argued that women's rights to property rise women's economic participation and economic growth as well. This study showed a positive impact of household assets on the sustainable economic growth. However, in this study the impact of household assets on sustainable development in Central Punjab is found insignificant. (76.3% women are not given inherited property).

One of the most striking indications of the inequality between men and women worldwide is the gender gap in unpaid caring (UPCW). Women do 75% of such work worldwide, with an average of four and twenty-five minutes (Dhar, et al. 2020). They therefore have less time to work or work longer hours, combining paid and unpaid work. Unpaid work for women subsidises the care costs of supporting families, promoting economies and often covering social services lacking. (Mugehera and Parkes, 2020). Empirical finding suggests that the increase in women unpaid work in Central Punjab will reduce the level of sustainable development by 0.146 points.

.The above mentioned factors collectively bring 31% change in the sustainable economic development of Central Punjab as shown by the value of R² (0.311). From the estimated coefficients of the factors, following equation has been constructed. The most influential factor is found the adoption of technology for sustainable economic development followed by the increasing women empowerment and reduction in unpaid domestic care work by women and lowering number of children in Central Punjab.

$$SEDI = 4.442 + 0.089 CWEMI + 0.0213 REDU + 0.021 RHEDU + 0.46 TECH - 0.167 NCHLD + 0.025 HPAST - 0.146 UPCW \dots\dots\dots 4$$

Table 4: Regression Result of Impact of Women Empowerment on Sustainable Economic Development for Central Punjab

Dependent Variable: SEDI_(Shiekhunura)	Coef.	S.E	T	P> t
Commutative Women Empowerment	0.089	0.042	2.11	0.036
Education of Female Respondent	0.0213	0.102	2.09	0.038
Education of Respondent' Husband	0.021	0.015	1.37	0.171
Adoption of Technology by the	0.46	0.124	3.71	0.000
Number of Respondent' Child	-0.167	0.079	-2.11	0.036
Access of Household Physical Assets	0.025	0.028	0.88	0.380
Women Unpaid Work	-0.146	0.070	-2.08	0.038

C	4.442	0.549	8.09	0.000
Summary Statistics				
Number of observations = 257		F(7, 249) = 16.31		
Prob> F = 0.0000:		R-squared = 0.31		

Source: Author’s own Calculations

4.4. Regression Analysis Of Impact of Different Dimensions Of Women Empowerment On SEDI For Central Punjab

In previous section 7.4.2. the impact of cumulative women empowerment index has been analyzed on sustainable economic development. The cumulative women empowerment index has constructed by using six dimensions. These dimensions are psychological empowerment of women, social mobility, familial dimension, household’s decision making dimension, political and economic dimension of female empowerment. In this section, the impact of each dimension on sustainable economic development has been analyzed by using OLS method. After the estimation of regression model, following equation 6.8 formulated.

$$\begin{aligned}
 \text{SEDI} = & 3.20 + 0.274 \text{ PSYEMP} + 0.066 \text{ SMOB} + 0.66 \text{ FAMILIAL} \\
 - & 0.078 \text{ HHDM} - 0.121 \text{ POL} + 0.68 \\
 \text{ECO} & \dots\dots\dots 5
 \end{aligned}$$

The empirical results in Table 5 show that insignificant impact of social mobility, household decision making, and political dimensions on sustainable economic development of Central Punjab. While psychological empowerment, familial/interpersonal empowerment, and economic empowerment of women significantly and positively influence the sustainable economic development in Central Punjab.

Women have a stronger role in the their inspiration, self-intérêt and morality to engage in national programmes such as education, governance, health issues, agriculture, and growth (Pam Rajput, 2001; 6798

The psychology of women plays a crucial role in the empowerment and sustainable growth of women's businesses (Onyishi and Agbo 2010). It helps boost the mental health of women and promotes the empowerment of women economically (Batool et al . 2019). Also, Oladipo (2009) are of the view that psychology among women directly increases an economy's economic growth. These arguments are also supported by the results of this study. An improvement in the level of women's self- efficacy will increases the sustainable economic development by 0.273 points in Central Punjab's. It means that women's psychological empowerment promotes women's economic empowerment as well as economic growth.

Social mobility is a major economic empowerment factor for women (Kabeer, 2012). It is also consider the drivers of growth. A new analysis found that low social mobility would cost the UK economy £140bn a year over the period to 2050, amounting to £ 1.3bn in GDP losses over the next 40 years (Social Mobility Report 2020). In addition, even small rises in social mobility could increase GDP growth in the UK by 2–4 percent a year. Thus, increased social mobility may serve as a significant lever in high-income economies to reinvigorate economic growth in a framework of slowing productivity growth, medium-income growth and transitions in technology and the environment. In addition , research recently indicates that low social mobility is important part of the negative relationship between income inequality and economic growth, which may increase the negative effect of income inequality on the rate of growth (Aaberge et al. 2020). In particular, low levels of equal opportunities are not unreasonably relevant.

The Central Punjab women's are more educated as compared to Southern Punjab women. These women are know-how about every matter of life because they residing near the big city like (Lahore). However, the impact of social mobility on sustainable economic development of Central Punjab is found insignificant which depicts the

presence of patriarchal culture in Pakistan where mobility of women is restricted .on the other hand education level of our sample women is low so mobility/social gatherings not for eco activities

Women's familial empowerment has an impact on sustainable economic development. It has also been found that women with more family/interpersonal capacity contribute more to sustainable economic development than women with fewer family capacity. The findings also revealed that women who are more empowered in familial dimension may influence sustainable economic development (Huis, et al. 2017). The results of this study showed that the familial empowerment has a positive impact on Central Punjab's sustainable economic development. One point increase in familial empowerment increases 0.668 points of sustainable economic development. Malhotra et al. (2002) found that the family system is increasing underdeveloped countries economic capacity. The result is consistent with Malhotra et al. (2002).

Haque, et al. (2011) claimed that regulation of decision-making is an essential element of the principle of empowerment/autonomy. Household decision-making and political empowerment have negative but insignificant influence on sustainable economic development. The effect of women with more family decision-making and greater social mobility on sustainable economic growth is lower. In Central Punjab, most women are less educated and cannot take decisions because women discourage family awareness and always consider themselves to be wicked or less thoughtful. So, man did not give the decision-making power.

Oxaal and Baden (1997) argued that women's political empowerment is essential for women's empowerment, as more women in politics will help women at all levels. Political leadership of women will contribute to women's entrepreneurship by lifting existing limitations on women's economic behaviour, if such reforms are introduced (Goltz, et al . 2015). Political decision-making also matters. Studies by Bhalotra and Clots-Figueras (2014), Chattopadhyay and

Duflo (2004) and Duflo (2012) have, in particular, revealed that women's political empowerment promotes public goods, stronger human resources, and less infant mortality in India. These outcomes are, of course, valuable in and of themselves, but they also have an indirect impact on growth. Baskaran et al . (2017) actually show that elected women government leaders in India have a substantial positive effect on their electoral progress. Similarly, King et al . (2009) reveals simulation results that show that the effects of women's political empowerment on income as well as on mortality reduction can have a major impact on growth.

However, the empirical result of this study depicts that the political dimension of women empowerment has insignificant impact on sustainable economic development for Central Punjab. The reason is that, the Central Punjab is the urban area. In urban areas, most of the women have not interested in political affairs because in urban areas people daily life expenditure are much high and these women cover it very hardly so, always indulged in their livelihood. Our Central Punjab's political empowerment dimension of women has negative. But as the coefficient value is insignificant we will ignore the negative sign.

Women's economic empowerment involves welfare, access to resources, awareness-rising and control (UNICEF 1994). Here, access to resources deals with easy availability of resources. Access equality for women toward economic and financial resources is deemed extremely important to accomplish sustainable economic growth and development (United Nations, 2009). Both economic and financial resources pose important implication in determining women's role in maintaining sustained family welfare, in jobs market, and in economy in greater context (Setyari, 2018).

The results disseminated that the sample respondents who have access to formal financial institutions and saving mechanism have more significant positive influence on sustainable economic and the women who are not economically empowered have less impact on sustainable

development in Central Punjab. The result suggested that increase in the level of women economic empowerment in Central Punjab will increase the 0.69 points of sustainable economic development of Central Punjab. The result is consistent with the findings of Kabeer (2002).

The empirical result suggested that these dimension collectively variate the sustainable economic development by 20% as shown the value of R^2 (0.1918) in Table 5.

Table 5: Regression results of the impact of different dimension of women empowerment on Sustainable Economic development for Central Punjab

Variables	Estimate Robust HC3	Std. Error	T value	Pr(> t)
C	3.2027	.6251	5.12	0.000***
PSYEMP	.2739	.06991	3.91	0.000***
SMOB	.0669	.1128	0.59	0.553
FAMILIAL	.6679	.2015	3.31	0.001 ***
HHDM	-.0780	.0649	-1.20	0.231
POL	-.1271	.1815	-0.70	0.484
ECO	.6891	.1535	4.49	0.000***

Source: Author's own Calculations Significance Level: 0'***',
0.001'***', 0.01'**'

5. Conclusion and policy implications

Empowerment is one of the main ceremonial concerns when addressing human rights and sustainable development. In Pakistan the male dominated behavior along with numerous social customs hampers involvement of women in paid job and mostly women are destitute from their inherited property. Women empowerment is essential in Pakistan for sustained economic development. The present study collected data of 370 respondents by using multistage

cluster sampling in rural and urban areas of Southern Punjab. The response from respondents was collected through face to face interview.

Present study constructed comprehensive cumulative woman empowerment index (CWEI) by six dimensions through polychoric principal component analysis. These dimensions are household decision making (ordinary household decision making and large economic decision making), social mobility, access to formal financial institutions and saving mechanism, political, familial and psychological empowerment. The study also analyzed the impact of women empowerment on sustainable development.

Central Punjab women are more inspired than other regions as the most developed region in Punjab. However, the role of women in education, the number of children, hand washer, the cosmopolitan status of women, the property earned from their parents and the loan from the banks used for personal businesses are of little interest. In addition to the reasons for this, the age of women is growing substantially, including the payment of work, access to financial institutions for women and the home, access to better medical care, participation in social events, written material on Nikah nama, safety details for women with diseases, the willingness of women to share in and their caste of vote. With regard to non-paid household care, the fear of father or husband violence, residential area and the arrangement of the family in central Punjab, the potential for women is greatly reduced.

The empirical findings of the analysis of Central Punjab have revealed positive impacts of the schooling of the respondents' on sustainable economic growth index. The findings display the positive effect on Central Punjab development level of the introduction of women's modern technologies. The number of children is very critical for women's empowerment and sustainable economic development. More children need more time for women to feed their children. Mother can't take the

best time for more infants. Have low power, ultimately. Low empowerment of women leads to low female economic activity and low economic growth. The longitudinal findings suggest that the number of children negatively affects sustainable economic growth. Women's unpaid household care job in Central Punjab has a substantial negative effect on sustainable economic development.

The social mobility, domestic decision-making and political factor have shown that the impact on sustainable economic development is statistically negligible. The results indicated an important positive impact on the sustainable economic growth of Central Punjab psychological empowerment, family / family empowerment and economic empowerment of women.

Furthermore, in traditional places like the Punjab, where many women do not know their identity, their right to law and their self-productive burden of family relations, the challenge of empowering women is not simple but complicated. Ultimately, it was found that equality for women is only possible when all participating organizations partner with one another and understand the influences addressed in this report, as defined by UNDP and the SDGS 2030. The whole community must acknowledge women's potential and their contribution to the growth process Empowering and developing women are necessary ingredients for the potential development of society as a whole, both socially and theoretically, so that sustainable progress can be assured in 2030.

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