

## **Factors Affecting Livelihood Diversification of Women of Farm Families Working in Textile Industries in Faisalabad District, Pakistan**

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### **ABSTRACT**

The economy of Pakistan is agro-based, and rural women's livelihoods are linked to men's. In the meantime, livelihood diversification and labor mobility have impacted working men and women. This study highlights the factors influencing women's decision-making abilities to diversify livelihood strategies from on-farm to off-farm activities in Faisalabad district, Pakistan. Two textile industries were selected in Faisalabad, and 115 females participated in the study. The interview schedule was used to elicit information from women from farm families working in the textile industries. Data collected were analyzed using descriptive and inferential statistics. Most women reported that daily-based wages (85.2%), poultry (63.5%), livestock (55.7%), farming (40.9%) and casual labor (40.0%) were among the available livelihood diversification strategies in use. The foremost factors influencing the decision to engage in more sources of income were inter-role conflict ( $3.78 \pm .88$ ), family pressure ( $3.71 \pm .81$ ), and stereotypic influences ( $3.68 \pm .96$ ). It was concluded that the women who have diversified their livelihood were faced with gender-based discrimination ( $3.84 \pm .67$ ), lack of education ( $3.78 \pm .73$ ), non-cooperation of colleagues ( $3.77 \pm .82$ ), and low wages ( $3.69 \pm .76$ ) in the textile industry. The study suggested gender-friendly initiatives that will minimize conflicts and family pressures, particularly for women, as this will foster a successful livelihood diversification approach.

*Keywords:* Decision-making, diversification, farming households, income, livelihood, non-farm

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## INTRODUCTION

The agricultural sector, particularly at the rural level, is indispensable to Pakistan's economic growth, food security, employment generation, and poverty alleviation. It contributes 19.2% to the gross domestic product (GDP) and employs around 38.5% of the labor force. More than 65–70 percent of the population depends on agriculture for its livelihood (Pakistan Economic Survey, 2015), and agriculture remains a high-risk enterprise while women's role has continued to generate resource base and power issues; yet they must find ways to cope with a variety of socio-economic, environmental, and decision-making capabilities daily (Chimgonda-Nkhoma et al., 2019). Given the unpredictability of farmers' revenue due to the high-risk nature of agriculture, off-farm diversification is a key approach for agricultural households to safeguard their incomes (Iqbal et al., 2016). Climate shocks such as floods, droughts, insufficient agricultural yields, market failures and price changes have necessitated that farmers have had to transfer their labor to off-farm businesses to sustain household food demand (Aderinoye-Abdulwahab et al., 2015). Additionally, poor rural families are more predisposed to seasonal risk variables than urban families; hence, the capacity to diversify into multiple income sources is important for their survival. Women account for about half of the population in Pakistan. They contribute substantially to the labor force and perform as many tasks as the males in agricultural activities. In addition, they also take care of their homes and families.

Female workers in various parts of the world, including Asia, put in long hours from dawn to night-time, yet society does not recognize their efforts. They are also not adequately compensated, particularly in rural and most urban regions. Hence, women face several hurdles compared to their male counterparts. Family life balance, arduous work and its conditions, family and society-related assistance, culture and norms-related challenges, and workplace structure are a few of the difficulties women encounter (Javaid et al., 2020). Working women of all ages, married or single, face multiple stereotyped obstacles at work, and these cause stress, sadness, and lack of confidence. These make them unable to strike a balance between work and family life owing to job insecurity issues (Javaid et al., 2020).

It has been observed that rural livelihood diversification is usually influenced by a variety of push and pull forces. Despite the recognized importance of improving rural household income, Pakistan remains one of the least studied countries while trying to understand how rural household inclination and off-farm rural activities impact incomes at the micro level. The lack of capital, poor infrastructure, lack of access to finance, lack of access to markets, and shortage of farmlands are among the problems rural households encounter in diversifying their livelihoods (Kassa, 2019). Certain attitudes, such as desire, past behavior and perceived behavioral control, equally influence decision-making ability (Sayginer & Kurtsan, 2022). For these reasons, this study aims to analyze the

decision-making ability of women in farm families in Faisalabad District, Pakistan, with special emphasis on their livelihood diversification status.

Studies have equally shown the economic activities and livelihood diversification of women in rural Faisalabad, Pakistan (Haq et al., 2017; Haq et al., 2021), but no study has presented factors responsible for the choice of livelihood activities of the women. Thus, it is evident that there is a dearth of knowledge of the factors that affect women's decision to diversify their livelihoods in textile industries in Faisalabad District, Pakistan. Consequently, the main objective of this study is to provide empirical data for a clear understanding of the factors affecting their livelihood diversification.

The specific objectives were to:

1. Describe the socio-economic characteristics of the women in the textile industry in Faisalabad, Pakistan.
2. Determine the livelihood diversification strategies of rural women in the textile industry in Faisalabad, Pakistan.
3. Identify the factors influencing the decision-making ability of the women in the textile industry to diversify their livelihoods.
4. Identify the constraints faced by the women in the textile industry in Faisalabad, Pakistan.

## Literature Review

Irrespective of the region or the type of civilization around the world, working

women have faced a variety of difficulties in human culture. In Asian organizations, particularly in the Indo-Pak region, the problem is getting worse. Furthermore, the challenges become more intense when it comes to working women. Numerous women from the Indo-Pak sub-continent continue to face serious challenges, especially in terms of financial rewards and social perspectives. As a result of Pakistan's socio-cultural structure, the country's labor force is not treated equally in terms of capacity and productivity. This tendency imposes numerous limits, such as gender-based discrimination on female labor market participation.

Small-scale farmers' livelihood diversification is critical for reducing hunger and mitigating the negative effects of climate change, given that agriculture continues to be the most important source of income. Despite various agricultural promotion measures, Pakistan's agricultural productivity is still rated low, even as livelihood diversification from agriculture tends to be gaining more prominence. It, therefore, becomes more pertinent for small-scale farmers' livelihoods to be improved to promote livelihood diversification. It can be achieved if the government takes appropriate policy actions, including creating national jobs (Shah et al., 2021). Such strategies and policies had previously placed heavy emphasis on farming-related activities while ignoring the potential for non-farm diversification, even though non-farm sources of income have often proven productive (Naudiyal et al., 2019). The

textile industry is equally one sector that offers great potential in terms of off-farm livelihood opportunities.

Farm households must diversify their income streams to meet their food and subsistence needs. However, it has not always been easy to grow income sources for rural residents and small-scale farmers due to labor market constraints, land market conditions, unavailability of natural resources, and lack of institutional support (that aids farmers' yield improvement and the choice of more diversification options for livelihoods) (Aderinoye-Abdulwahab et al., 2015; Shah et al., 2021). Diversification is the process of creating income-generating portfolios with low covariate risk (Asravor, 2018). Hence, the ultimate purpose of livelihood diversification is to provide long-term benefits such as greater income, enhanced food security, reduced vulnerability, and increased welfare (Dinku, 2018). Human, financial, social, and natural- and physical assets are some determinants that influence rural communities to broaden their livelihood potentials from on-farm to off-farm activities. Diversification of livelihoods is a common strategy for dealing with economic and environmental shocks, as well as a key component of poverty reduction (Gautam & Andersen, 2016).

### **Theorizing the Phenomenon**

This study adopts three theories that guide livelihood diversification. They are household economic theory (Singh, 1986),

livelihood approach theory (Chambers & Conway, 1992) and theory of choice (Etuk et al., 2018). The household theory regards farm households as production units that maximize satisfaction. It is achieved by combining time and other inputs to generate output, but subject to price and resource constraints. According to the theory, diversification is a function of returns to labor from farm activities. The theory helps to examine household production and off-farm labor allocation decisions.

The livelihood approach theory has been used in studies relating to livelihood strategies, poverty, and livelihood diversification. The theory states that "livelihood diversification is beneficial to the rural poor because it reduces risks and stabilizes income flow and consumption. It leads to improvement in quality of life, wealth accumulation and food security". The theory aids in the assessment of people's livelihood assets. According to the theory of choice, diversification represents the initiative of selecting diversity over consistency (De Giorgi & Mahmoud, 2016). Several studies have shown that the socio-economic characteristics of rural women influenced their decision to adopt livelihood diversification. According to Kongla and Akoh (2019), being unmarried and divorced negatively influenced the diversification of livelihood. On the other hand, age is a positive factor that influenced the choice and nature of diversification of rural women's activities in Cameroon. Oludipe (2019) reported that the household size of rural women had no significant

influence on livelihood diversification in Nigeria, while Islam et al. (2022) also reported that educational status, family size, work experiences, personal income, savings, and training significantly affected rural women's involvement in off-farm activities in Bangladesh. Hafeez and Ahmed (2002) found females' educational level to be a strong and positive factor that influenced the decision of educated married women to participate in the labor market in the Punjab district of Pakistan, while Habib et al. (2022) similarly found that educational level was a significant factor for adopting livelihood diversification among rural women in Pakistan.

Thus, the study tested a hypothesis using Spearman's correlation to further establish the relationship between rural women's socio-economic factors and their decision-making ability in the textile industry in Faisalabad, Pakistan.

H1: Socio-economic factors do not significantly affect the decision to diversify livelihood.

## METHODS

### Study Area

The current study, which focuses on the analysis of livelihood diversification of farm families with special reference to decision-making by the women working in textile industries, was conducted in Faisalabad district, Pakistan (Figure 1). The textile sector in Pakistan employs over 15 million people and accounts for 9.5% of the country's GDP. Pakistan is Asia's fourth-largest cotton producer, with the third-largest spinning capacity after China and India. The country accounts for 5% of the global capacity of cotton production. In many developing countries, like Pakistan, women are the primary labor providers in the textile sector, which is notorious for its poor working conditions and lack of worker rights (Mahboob & Anita, 2016). Asia exports 58.4% of all clothes and textiles in the globe (Khan et al., 2020), while textiles involving regional diversity in embroideries may be found in many regions



Figure 1. Map of district Faisalabad, Pakistan

Source: Authors' work

of Pakistan. Punjab (primarily Faisalabad) is the center of the textile industry, while women's contributions to the development of textiles and textile-related industries have received little attention (Baghal et al., 2019). District Faisalabad was chosen for this study because, compared to other cities, it is Pakistan's Manchester because of its abundant textile and other industries.

### Research Design

The research is explanatory in nature and aims to provide a clear understanding of the factors affecting the livelihood diversification of women in farm families working in textile industries in Faisalabad District, Pakistan. The study relied on descriptive and inferential statistics to analyze data collected from the participants.

### Sample Size

A sample is the smallest single unit that possesses all the characteristics of a population. Simple random sampling was used to select two textile industries for the study. These industries specialize

in spinning, yarn dyeing, stitching and power plants. Pre-survey visits to these industries showed that 163 farm women were working there. Therefore, 163 female laborers in these industries constituted the study population from which the sample was drawn. A sampling calculator with a 5% confidence level and 95% confidence interval was used to determine the study's sample size (Figure 2). It allows for determining a sample that can produce results that precisely capture the target population. The sampling calculator gave a sample percentage of 70.5%, which translates into 115 women from the entire population of 163. Thereafter, the names of the 163 women were listed on paper, a number was assigned to each name from 1 to 163, and every alternate number was picked until a total of 115 sample size was attained.

### Research Instrument and Measurement

Female workers were interviewed in the textile industry, and the interview schedule (See Appendix) was prepared in English to facilitate the process of getting precise information. However, the questions were delivered in the respondents' local languages (Urdu and Punjabi). The questions were interpreted and validated by experts with a full grasp of both languages to ensure accurate information about the research. A reliable and valid interview schedule was developed to collect data that covered the objectives of the research. Before finalizing the interview schedule, relevant experts ensured face and content validity. Reliability

The image shows a digital interface for determining sample size. It has a title 'Determine Sample Size'. Below the title, there are four rows of input fields and two buttons. The first row is 'Confidence Level:' with radio buttons for '95%' (selected) and '99%'. The second row is 'Confidence Interval:' with a text box containing '5'. The third row is 'Population:' with a text box containing '163'. The fourth row is 'Sample size needed:' with a text box containing '115'. Between the third and fourth rows, there are two buttons: a blue 'Calculate' button and a grey 'Clear' button.

Figure 2. Determination of sample size  
Source: Sample Size Calculator (n.d)

was measured by carrying out a pre-test on ten respondents. After taking responses from the respondents, the Cronbach Alpha test was used to check its reliability. The value of the Cronbach Alpha test was 0.811, which means it was fit and reliable for data collection.

Respondents were asked to indicate their level of education on a four-point Likert-type (1932) ordinal scale of illiterate, primary, middle, and high school while 1, 2, 3 and 4 numerals were assigned, respectively. Respondents were also provided with a list of possible sources of earning additional income for livelihood diversification. Such income sources included farming, agricultural labor, casual labor, and government employment, and they were requested to indicate the diversification strategies being used on a 2-point nominal scale of yes (diversified) or no (no diversification). At the same time, 1 and 0 numerals were assigned, respectively. Regarding constraints faced in the textile industry, respondents were given a list of 10 possible challenges (lack of skills, lack of communication skills, lack of education) to indicate the severity on a five-point Likert-type ordinal scale of very low, low, medium, high, and very high. At the same time, 1, 2, 3, 4 and 5 numerals were assigned respectively. Respondents were asked to indicate the level of effect of decision-making ability from the list of 7 factors (illiteracy, male dominance, family pressure) to determine the factors affecting respondents' decision to adopt livelihood diversification. A five-point Likert-type

ordinal scale of very low, low, medium, high, and very high was used with 1, 2, 3, 4 and 5 numerals assigned, respectively.

### **Data Analyses**

The collected data were prepared and arranged on the spreadsheet for analysis. Statistical Package of Social Sciences (SPSS) software was used to analyze the data using different techniques. These techniques were descriptive analysis (frequency, percentage, mean and standard deviation). At the same time, chi-square and Spearman's correlation were used for inferential analysis between socio-economic characteristics and the sample's decision-making ability.

## **RESULTS AND DISCUSSION**

### **Objective 1: Socio-economic Characteristics of Rural Women in Textile Industry in Faisalabad, Pakistan**

It is important to state that economic activities and livelihood diversification of women in rural Pakistan have already been recorded (Haq et al., 2017; Haq et al., 2021), but the factors responsible for the rationale behind women's choice of livelihood activities are yet to be documented. The current study, therefore, bridges the gap between the decision-making abilities of women working in textile industries and their livelihood diversification strategies in the Faisalabad district of Pakistan. The study found that a considerable part of the sample was relatively young, as 44% were in their thirties (Table 1). Age is depicted by the respondent's chronological number of

years counted from the first day of birth of the individual to the moment of information collection. Table 1 showed that 44.4% of the participants belonged to the third age group (29–33 years). It shows that female workers in textile industries were young and would be expected to be agile enough to contribute productively to the textile industry and family farming. The study found that a good proportion of the respondents were not lettered. Regarding respondents' education, around one-fourth (27.8%) of the participants were illiterate, indicating that the remaining majority were literate. High-level literacy among female textile workers is expected to help them be analytical and make logical decisions, consequently improving their decision-making power in various farm families. Islam et al. (2022) similarly opined that socio-economic factors such as educational status, family size, and work experiences significantly affected rural women's involvement in off-farm activities in Bangladesh, while Hafeez and Ahmed (2002) found that females' educational level is a strong and positive factor that could influence the decision of educated married women. In the same vein, Habib et al. (2022) also found that educational level was a significant factor in adopting livelihood diversification among rural women in Pakistan.

On marital status, a significant proportion (64.3%) of the participants were married, divorced, or widowed in the same manner that the majority (67.0%) were living in joint or extended family systems. Kongla and Akoh (2019) also affirmed that

being unmarried and divorced negatively influenced the diversification of livelihoods of rural women in Cameroon. These findings implied that the decision-making ability of the married females working in the textile industry might have been compromised and could have been transferred or designated

Table 1  
*Socio-economic characteristics of rural women in the textile industry in Faisalabad, Pakistan (n=115)*

|   | <i>f</i> | <i>%</i> |
|---|----------|----------|
| <b>Age groups</b>                               |          |          |
| 19–23 years                                     | 26       | 22.6     |
| 24–28 years                                     | 26       | 22.6     |
| 29–33 years                                     | 51       | 44.4     |
| 34–38 years                                     | 12       | 10.4     |
| <b>Education</b>                                |          |          |
| Illiterate                                      | 32       | 27.8     |
| Primary (1–5)                                   | 33       | 28.7     |
| Middle (6–8)                                    | 45       | 39.1     |
| High school (9–12)                              | 5        | 4.4      |
| <b>Marital status</b>                           |          |          |
| Married, Divorce, Widow                         | 74       | 64.3     |
| Unmarried                                       | 41       | 35.7     |
| <b>Family structure</b>                         |          |          |
| Nuclear   | 38       | 33.0     |
| Joint   | 77       | 67.0     |
| <b>Predominant occupation of the respondent</b> |          |          |
| Daily wages                                     | 70       | 60.9     |
| Farming   | 28       | 24.3     |
| Small Business                                  | 6        | 5.2      |
| Others  | 11       | 9.6      |
| <b>Land holdings</b>                            |          |          |
| Yes   | 7        | 6.1      |
| No  | 108      | 93.9     |
| <b>Income (PKR)</b>                             |          |          |
| 5000–8000                                       | 3        | 2.6      |
| 8001–10000                                      | 28       | 24.4     |
| 10001–14000                                     | 69       | 60.0     |
| Above 14000                                     | 15       | 13.0     |

*Source:* Authors' work



to their husbands or even the heads of the families in situations where such women were widowed. Such decisions might include matters related to work done in the textile industry or even activities on family farms.

Results in Table 1 further showed that the women engaged in hired labor, farming, and petty businesses. It was found that a substantial proportion (60.9%) were predominantly laborers with daily wage earnings; 24.3% relied heavily on farming as their main occupation, while only 5.2% engaged in small/petty businesses. Again, it was reported that personal income and savings could influence livelihood diversification (Islam et al., 2022). It shows that economic engagements that will yield daily wages were the predominant occupation and main sources of income for female textile workers in the study. Food is not only necessary to keep body and soul together, but it also serves to an end in the same manner that money is required to eat, live a good life, and obtain the other necessities of life. As a result, people take up various occupations; therefore, it was not surprising that the respondents in this study diversified into different occupations (on-farm and off-farm). It aligns with the household theory, which opined that farming households, which serve as production units, are needed to maximize satisfaction, hence the need for diversification.

On land holdings, only 6.1% of the sample had agricultural land, and a majority (93.9%) were landless. This finding may be attributed to the issue of marriage as

husbands (males) in most rural settings owned the land while their wives remained landless. Therefore, the decision-making ability to diversify into farming and the size of land cultivated by the female textile industry workers may be weak, as this greatly depended on their husbands. It is also noteworthy that women are usually not allowed to participate in family decision-making meetings, let alone contribute to matters relating to access and ownership of productive resources (Bayeh, 2017), and women have grown to accept such subsidiary roles in traditional African societies. Also, in Table 1, a large portion (60.0%) of the participants earned Rs. 10001–14000, the equivalent of less than \$100 ( $\equiv$ \$53.27–\$74.57). The livelihoods approach theory established that livelihoods can only be sustainable when physical, social, and economic assets are maintained at a level that translates to improved quality of life. It posits that livelihood diversification benefits the rural poor by reducing socio-economic risks and stabilizing income flow, ultimately resulting in enhanced livelihoods.

### **Objective 2: Livelihood Diversification Strategies for Rural Women in the Textile Industry in Faisalabad, Pakistan**

Empirical evidence from this study showed that the textile sector, through women's economic contribution, continued to impact farm families significantly. Yet, there is no documentary evidence to show that the government has made/implemented policies that could help to improve their productivity. There might be a need to

formulate relevant policies as well as implement rural development programs aimed at guiding the decision of rural women on existing opportunities for livelihood activities and potential impacts on the rural economy of Pakistan. Table 2 shows that a substantial part of the respondents adopted and engaged in multiple sources of income, including daily-based wages (85.2%), poultry (63.5%), livestock (55.7%), farming (40.9%) and casual labor (40.0%).

The findings are in consonance with previous research works where it had been established those women not only engaged in farming activities but also diversified into various off-farm and non-farm activities (Aderinoye-Abdulwahab et al., 2015; Kassa, 2019; Shah et al., 2021). It is also in line with the theory of choice, where, in this instance, diversification represents the initiative to select from a range of livelihood diversification strategies rather

than maintaining a monotonous means of living (farming) (De Giorgi & Mahmoud, 2016). Therefore, it becomes highly pertinent to understand and acknowledge the household diversification strategies, existing opportunities, and potential impacts of rural women in textile industries in the selected rural economy of Pakistan.

**Objective 3: Factors Influencing the Decision-making Ability of Women to Diversify Livelihood Strategies in the Textile Industry in Faisalabad, Pakistan**

Findings showed that certain indices, such as family pressures, inter-role conflicts, and stereotypic influences, triggered the decision-making abilities of farm women in this study. Data specified the factors responsible for women’s decision to diversify their livelihood strategies, which pushed them to adopt multiple sources of income (Table 3).

Table 2  
*Livelihood diversification strategies of rural women in the textile industry in Faisalabad*

| Source of income      | Yes |      | No  |      |
|-----------------------|-----|------|-----|------|
|                       | f   | %    | f   | %    |
| Farming               | 47  | 40.9 | 68  | 59.1 |
| Agricultural labor    | 19  | 16.5 | 96  | 83.5 |
| Casual labor          | 46  | 40.0 | 69  | 60.0 |
| Government employment | 37  | 32.2 | 78  | 67.8 |
| Daily based wages     | 98  | 85.2 | 17  | 14.8 |
| Business              | 9   | 7.8  | 106 | 92.2 |
| Remittances           | 8   | 7.0  | 107 | 93.0 |
| Cottage industries    | 16  | 13.9 | 99  | 86.1 |
| Livestock             | 64  | 55.7 | 51  | 44.3 |
| Poultry               | 73  | 63.5 | 42  | 36.5 |
| Others                | 18  | 15.7 | 97  | 84.3 |

Note. Multiple responses were allowed  
Source: Authors’ work

Table 3  
*Factors affecting rural women’s livelihood diversification in the textile industry in Faisalabad, Pakistan*

| Constraints                    | W.S. | Mean | Rank |
|--------------------------------|------|------|------|
| Gender-based discrimination    | 442  | 3.84 | 1    |
| Lack of education              | 435  | 3.78 | 2    |
| Colleagues are non-cooperative | 433  | 3.77 | 3    |
| Low wages                      | 424  | 3.69 | 4    |
| Lack of training               | 421  | 3.66 | 5    |
| Lack of communication skills   | 415  | 3.61 | 6    |
| Transport problem              | 414  | 3.60 | 7    |
| Lack of self-confidence        | 405  | 3.52 | 8    |
| Lack of skills                 | 402  | 3.50 | 9    |
| Unpaid employees               | 390  | 3.39 | 10   |

Note. W.S.: Weighted score  
Source: Authors’ work

In light of the findings, inter-role conflict (mean=3.78±0.88), family pressure (mean=3.71±0.81) and stereotypic influence (mean=3.68±0.96) were the leading factors responsible for respondents' decision to adopt some other sources of income (Table 4). In agreement with these findings, studies have reported that stereotypic instances usually influenced decisions to engage in livelihood diversification (Chingonda-Nkhoma et al., 2019; Villanueva-Moya & Francisca, 2021). These findings are equally in line with those of Kosec et al. (2021), who found that neighbors and family members greatly influence women's decision-making ability for livelihood diversification.

Further analysis to assess the influence of educational status on the decision of the women to undertake multiple sources of income indicated that inter-role conflict ( $\chi^2=20.475$ ;  $p<0.05$ ), stereotypic influence ( $\chi^2=23.544$ ;  $p<0.01$ ), less appreciation ( $\chi^2=22.077$ ;  $p<0.01$ ), lack of awareness ( $\chi^2=21.631$ ;  $p<0.05$ ),

male dominance ( $\chi^2=22.837$ ;  $p<0.05$ ), and illiteracy ( $\chi^2=23.544$ ;  $p<0.01$ ) were significantly influenced by respondents' educational status (See Table 4); thereby suggesting that women's decision to engage in livelihood diversification is a factor of their level of education. It meant that women with inadequate levels of education might decide not to diversify but rather continue to work in the textile industry even when they experience inter-role conflict, stereotypic influence, less appreciation, lack of awareness, and male dominance in the textile industry. Studies have shown that male dominance, less appreciation of the female folk, and illiteracy have become reasons why males continue to dominate over women in developing societies (Carlana, 2019; Kosec et al., 2021; Larsson & Alvinus, 2019). Therefore, women might not consider these factors necessary to take additional jobs if they do not have the required educational qualifications to diversify their livelihoods or search for alternative sources of income.

Table 4  
*Factors affecting rural women's decision to adopt livelihood diversification in the textile industry and the influence of educational status in Faisalabad, Pakistan*

| Factors             | Educational status |      |      |      |          |                    |
|---------------------|--------------------|------|------|------|----------|--------------------|
|                     | W. S               | Mean | S. D | Rank | $\chi^2$ | p-value            |
| Inter-role conflict | 435.00             | 3.78 | .88  | 1    | 20.475   | 0.015*             |
| Family pressure     | 427.00             | 3.71 | .81  | 2    | 19.451   | 0.78 <sup>NS</sup> |
| Stereotypes         | 424.00             | 3.68 | .96  | 3    | 23.544   | 0.005**            |
| Less appreciation   | 418.00             | 3.63 | .97  | 4    | 22.077   | 0.009**            |
| Lack of awareness   | 410.00             | 3.56 | .96  | 5    | 21.631   | 0.042*             |
| Male dominance      | 402.00             | 3.49 | 1.02 | 6    | 22.837   | 0.029*             |
| Illiteracy          | 401.00             | 3.48 | 1.04 | 7    | 23.544   | 0.005**            |

Note. W.S.: Weighted Score; S.D.: Standard Deviation;  $\chi^2$ -Chi-Square; NS = not-significant, \* = Significant (at 5% level), \*\* = Significant (at 1% level)

Source: Authors' work

However, family pressure ( $\chi^2= 19.451$ ;  $p>0.05$ ), a leading factor for the decision to take more jobs, indicated no significant association with the level of education. It implied that educational qualifications are never considered for women’s decision to search for and be engaged in more jobs if family pressure existed. It is an indication that literate and illiterate women working in textile industries undertook more jobs to diversify their livelihood when family pressure existed, though mostly for financial support. It further implied that family pressure is a strong push factor for livelihood diversification among women working in the textile industry in the study.

**Hypothesis Testing: Relationship Between Socio-economic Factors and the Rural Women’s Decision to Diversify Livelihood in Textile Industry in Faisalabad, Pakistan**

The Spearman correlation analysis (Table 5) showed the socio-economic factors affecting the decision to diversify livelihood strategies among women working in textile industries. Spearman’s correlation

coefficient ( $r = -.225$ ;  $p = .016$ ) showed a significant but inverse relationship between age and the decision-making ability of rural women in the textile industry (Table 5). Age negatively but significantly influences women’s decision-making abilities in the textile industry. It could be that the older women were still not able to make informed decisions regarding household incomes and the textile industry despite having garnered more experience that could help them navigate through the industry with fewer issues. In contrast, younger women with higher education qualifications might have adjusted to the intrigues of the industry and, hence, were better able to make more informed decisions. It also implied that younger women tend to undertake additional jobs/occupations in the textile industry more than older women.

The Spearman correlation coefficient of education ( $r = .342$ ;  $p = .000$ ) showed a significant positive relationship. The implication is that women with higher levels of education were better able to make informed decisions that resulted in paid jobs in the textile industry compared

Table 5  
*Relationship between socio-economic factors and the rural women’s decision-making ability in the textile industry in Faisalabad, Pakistan*

| Socio-economic characteristic | Pearson correlation coefficients | p-value            |
|-------------------------------|----------------------------------|--------------------|
| Age of respondents            | -.225                            | .016*              |
| Education of respondent       | -.342                            | .000**             |
| Marital status of respondents | -.228                            | .014*              |
| Household size of respondents | .046                             | .626 <sup>NS</sup> |
| The landholding of respondent | .032                             | .736 <sup>NS</sup> |
| Women's total income          | -.308                            | .001**             |

Dependent variable = Constraints  
Source: Authors’ work

to women with lower levels of education (the illiterates) who might likely remain in farming occupations where little or no literacy is needed. It was similarly reported that households with low education levels were affected by poverty more than those with higher levels of education in Nepal (Acharya et al., 2022).

Furthermore, a significant but negative relationship existed between marital status and the decision to diversify livelihood strategies in the textile industry ( $r = -.228$ ;  $p = .014$ ) (Table 5). Thus, unmarried women had better decision-making abilities than their married counterparts in the textile industry. Consequently, unmarried women in the textile industries had better chances to adopt livelihood diversification strategies than those who were married. Again, this result may not be out of place as married women could rely on their spouses and other family members to make decisions. In contrast, unmarried women might be more independent in terms of decision-making. The correlation coefficient of income ( $r = .308$ ;  $p = .001$ ) also showed that the women who had higher incomes had a higher probability of diversifying their livelihoods than those with lower incomes. Lower income translates into less diversification of livelihood in the textile industry (Table 5).

On the decision to diversify livelihood, there was no significant relationship between household size ( $r = .046$ ;  $p = .626$ ) and size of land holdings ( $r = .032$ ;  $p = .736$ ) of the women working in the textile industry. The interpretation here is that the size of land holdings and number

of people in the women's households did not play any significant role in the way decisions were made and the kind of livelihood diversification made by the women. Hence, women were able to make decisions in whatever direction they chose, regardless of their household and land sizes. Overall results showed that age, education, marital status, and income had significant relationships with the decision-making abilities of women working in the textile industry to diversify their livelihood. This finding is corroborated by Omang et al. (2020), who found that human assets, education, and skill transform the capability of rural households to diversify their incomes. These findings are equally in line with Nusrat (2021), who reported that the prospects for women to adopt livelihood diversification vary considerably due to social, cultural and economic norms of the society. Moreover, acknowledging the presence and associations of rural leadership will greatly influence and substantially impact decision-making ability that will enhance the planned change toward community development (Hou & Wu, 2020).

## CONCLUSION

The study concluded that non-farm employment is critical in boosting the revenue of rural women households, with nearly three-quarters of the women combining daily wages, poultry farming, and livestock production. At the same time, it is also a viable method for supplementing the living standards of rural

women in Faisalabad, Pakistan. Factors responsible for women's decision-making in livelihood diversification were illiteracy, inter-role conflict, stereotypic influence, less appreciation, and lack of awareness. Rural women's farm families, therefore, diversified into the textile industry as one of the daily occupations that could be used to complement their livelihoods. Despite diversifying into the textile industry, rural women are still faced with challenges such as gender-based discrimination, lack of education, non-cooperation of colleagues, low wages, lack of training, lack of communication skills, transport problems and lack of self-confidence in the textile industry. It, therefore, means there is still a dire need to boost farm women's capacity by strengthening them in the identified inadequacies. It was also established that certain socio-economic factors such as age, education, land holdings, household sizes and household incomes had a bearing on the decision-making ability of rural women in the textile industry. Consequently, women with higher levels of education, larger land holdings, and higher incomes might have firmer capacities to improve their livelihoods.

### **Implication and Recommendation for the Study**

Given the findings of this study, it was shown that women working in the textile industry diversified their livelihood into both farming and off-farm income sources. Thus, relevant governmental agencies should provide an enabling environment

for women and men to equally participate in workplaces of their choice, and this should be made possible by enacting appropriate legislative policies geared toward ending gender-based discrimination and low wages among women. It was also established that women's lack of formal education posed a challenge to livelihood diversification decisions. The Pakistani government should, therefore, mount education programs targeted to favor adults so rural women could benefit. More importantly, family pressure is a strong push factor for livelihood diversification among women in the textile industry. Consequently, rural agro-based small-scale industries should be encouraged through policy reforms to diversify agricultural resources. Moreover, rural agro-based industries would also provide jobs for rural women so they could financially support their families for enhanced livelihoods.

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## APPENDIX

### Questionnaire (Interview Schedule)

Title: An Analysis of Livelihood Diversification of Women of Farm Families working in the Textile Industries in District Faisalabad, Pakistan

#### Part A:

To investigate the socio-economic characteristics of respondents

#### General survey data

Date of interview : \_\_\_\_\_  
 Name of interviewer : \_\_\_\_\_

#### Socio-economic characteristics

1. Age (years):  19–23  24–28  29–33  34–38  >38
2. Education level:  Illiterate  Primary (1–5)  Middle (6–8)  High school (9-12)  
 Graduate and above
3. Marital status:  Married  Divorce  Widow  Un-married
4. Household size:  3–4  5–6  7–8  ≥9
5. Who is the head of the household?  Father  Husband  Respondent
6. Type of family:  Nuclear  Joint
7. Predominant occupation
8. Daily wages
9. Farming
10. Small business
11. Government job
12. Others
13. Do you have landholding?  Yes  No. If 'YES,' then how much? .....
14. Women's total income  
 5000–8000 (PKR)  
 8001–10000 (PKR)  
 10001–14000(PKR)  
 Above 14000 (PKR)
15. Doing overtime  
 Yes  
 No

#### Part B:

To identify the available sources of income adopted by rural farm families.

#### Livelihood diversification strategies of rural women in the textile industry in Faisalabad

| S/N | Source of income      | Yes | No |
|-----|-----------------------|-----|----|
| 1   | Source of income      |     |    |
| 2   | Farming               |     |    |
| 3   | Agricultural labor    |     |    |
| 4   | Casual labor          |     |    |
| 5   | Government employment |     |    |
| 6   | Daily base wages      |     |    |
| 7   | Business              |     |    |
| 8   | Remittance            |     |    |
| 9   | Cottage industries    |     |    |
| 10  | Livestock             |     |    |
| 11  | Poultry               |     |    |

**Part C:**

To identify the access of farm women towards decision-making of choosing their alternative source of income

1. Factors that affect women's decision-making ability

| S/N | Factors that affect women's decision-making ability | 1 | 2 | 3 | 4 | 5 |
|-----|---|---|---|---|---|---|
| 1   | Illiteracy  |   |   |   |   |   |
| 2   | Family pressure                                     |   |   |   |   |   |
| 3   | Inter-role conflict                                 |   |   |   |   |   |
| 4   | Stereotype  |   |   |   |   |   |
| 5   | Male dominance                                      |   |   |   |   |   |
| 6   | Lack of awareness                                   |   |   |   |   |   |
| 7   | Less appreciation                                   |   |   |   |   |   |

2. Perception of women towards decision-making of choosing their alternative source of income

| S/N | Statements  | Yes | No |
|-----|---|-----|----|
| 1   | Do you think that jobs raise the social status of women?                          |     |    |
| 2   | Do you think that the families encourage their daughters to seek jobs?            |     |    |
| 3   | Do you think that jobs have an impact on the empowerment of women?                |     |    |
| 4   | Do you think that the job provides financial independence to women?               |     |    |
| 5   | Do you think the job enables women to play a leading role in the family?          |     |    |
| 6   | Do you think that the job develops confidence in the daily life of women?         |     |    |
| 7   | Do you think the job enables women to make personal life decisions freely?        |     |    |
| 8   | Do you think that the social status of men and women is equal in their workplace? |     |    |
| 9   | Do you think that job has an impact on the marriage of women?                     |     |    |
| 10  | Do you think that job opportunities for women are equal to men?                   |     |    |

Scale= 1=Very low, 2=Low, 3=Medium, 4=High, 5=Very high

**Part D:**

To explore the factors/challenges faced by farm families working in textile industries.

| S/N | Factors                        | 1 | 2 | 3 | 4 | 5 |
|-----|--------------------------------|---|---|---|---|---|
| 1   | Lack of skills                 |   |   |   |   |   |
| 2   | Lack of communication skills   |   |   |   |   |   |
| 3   | Lack of education              |   |   |   |   |   |
| 4   | Lack of self-confidence        |   |   |   |   |   |
| 5   | Lack of training               |   |   |   |   |   |
| 6   | Unpaid employees               |   |   |   |   |   |
| 7   | Low wages                      |   |   |   |   |   |
| 8   | Gender-based discrimination    |   |   |   |   |   |
| 9   | Colleagues are non-cooperative |   |   |   |   |   |
| 10  | Transport                      |   |   |   |   |   |

Scale: 1= Very low, 2=Low, 3=Medium, 4= High, 5=Very high

**Part E:**

To provide research-based suggestions to rural working women

How can rural women play a role in improving their family livelihood?

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Do you think that industries give sufficient opportunities for employment, which helps rural women and their family life to uplift their lives?

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