RESEARCH ARTICLE

Development of Processing of Agricultural Products by Women in Villages and its Role on the Economy of Rural Families

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ABSTRACT
The current research aims to investigate the development of the process of agricultural products by women and its role in the economy of rural families in Takhar villages. Although rural women in Afghanistan work with a traditional approach to promote agricultural education, they have been able to play a key role in promoting their agricultural products. The present study was carried out in Takhar province, Afghanistan, in 2023. The Cross-Sectional design method was used to collect the data. The research questionnaire includes five basic parts and two districts: (Kalafgan and Baharag). A multistage sampling technique was used to collect the data. In the present research, we selected 80 respondents randomly for the study. The findings of the present study show that agricultural products of rural women in Takhar province are considered one of the important achievements that provided not only the job of them but also their agricultural incomes a helpful and meaningful impact on the economy of their families, which means 47.5% of respondents agree that their agricultural products can play a good role in their family's economy, so 40% of them have a moderate view for this and the rest of them (12.5%) considered their agricultural products are not enough to grow of their family economy. Therefore, we can recognize that agricultural products can impact the economy of rural families in Takhar province. Also, the interview findings of the present research show that creating a foundation for the work of rural women in the field of agricultural products can help achieve the following goals: Women achieving independence in all matters, especially economic matters, getting Women rid of poverty unemployment and finding prosperity, empowerment and capacity building for rural women, freeing rural women from family violence due to economic problems, raising the economic level of rural families, proper use of rural women's labor force for the growth of the local economy and finally laying groundwork for the activation of women in all matters.

KEYWORDS
Development, Agricultural, Women, Villages, Economy, Rural Families.

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1. Introduction
Human resources play a significant role in promoting business affairs and economic income, and this process is also significant in the development of families' economies (Mashiri, 2020).

The major aspects of globalization that are related to rural development include the commercialization of agriculture and expansion of agricultural industries, liberalization of international trade and markets for food and other agricultural products, etc. The consequences of globalization for rural women are mostly complex; this means that for some women in rural areas, it offers constant changes and new opportunities in different sectors, especially in the agriculture sector, but for some of them, social exclusion and marginalization is considered a common thing (General Assembly of UN, 2005).

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Women make important contributions to the agricultural and rural economies in all developing countries. So, their roles vary considerably between and within regions and are changing rapidly in many parts of the world, where economic and social forces are transforming the agricultural sector (SOFA Team & Doss, 2012).

The birth rate in rural society is more economic, and this is to use free labor, among which the role of rural women is very important (Tarhani et al., 2020).

In Afghanistan, rural women are among the most deprived groups, who are involved in many problems and limitations in terms of living conditions, source of income, and financial positions. Therefore, even though they have a constructive role in the economy of the village or the economy of their families, a large part of the work done by them is regulated (Buzar Jamhari et al., 2010).

Many agricultural development programmers are on the ground intending to increase food production and improve the standards of living in (Third World countries). Therefore, women farmers are actively involved in the process of food production, processing, and marketing, and social and economic constraints have placed barriers around their access to scientific and technological information (Haile, 2016).

According to what has been said, the agricultural activities of women in the rural communities of Afghanistan include milking and preparing dairy products and spinning wool, helping in planting and harvesting agricultural products and exchanging them in local markets, working in the fields, etc. By looking at these activities of women, we can understand that they can play a significant role in the economy of the family and, ultimately, in society (Mirzayee et al., 2008).

To achieve economic development and the transition from traditional to advanced agriculture, it is necessary that the role of women in the development of rural agriculture is given serious attention and empowering fields are provided for them so that they can learn the necessary knowledge (Heydari & Jahannama, 2013).

Women make up half of the village population, and each of them has different duties and roles. In addition to their responsibilities inside the house, they are engaged in activities outside of the house, like agriculture, and in this way, they can play a key role in their economic growth (Mirlotfi et al., 2014).

The studies carried out in the field of women’s participation in various agricultural activities indicate that women, with their ability and experience, play a decisive role in various agricultural activities, and the studies explain their effective presence in the production and economy of their families (Barqi, 2018).

The focus on rural women calls for an understanding of the relationships between women and men in rural areas as well as the relationships between rural and urban areas. So, rural women everywhere are living in a rapidly changing world, and conditions for women in rural areas should be studied in the current context of change (Dekens & Voora, 2014).

Therefore, women in this field can be active in different sectors and play a significant role in their family’s economic income. Also, there is a different process in the villages for the economic income of families, especially women, who have a decisive role in agriculture and its agricultural products. Therefore, Afghanistan is a country where most of its people rely on agricultural resources, and this country has vast lands for agriculture and abundant water resources for irrigating lands, which has provided a good opportunity for farmers and families to benefit from this opportunity. According to what was said above, the present research is going to study the development of processing of agricultural products by women in villages and its role in the economy of rural families in Takhar province.

1.1 Objectives of the Study
To know the employment level of women in rural and their experiences in the field of processing agricultural products.
To study different types of agricultural products caused by women in the villages.
To study the level of satisfaction of rural women with their agricultural activities.
To know the level of effectiveness of agricultural products by women in the economy of their families.

1.2 Methods & Materials
The present study was carried out in Takhar province, Afghanistan, in 2023. The Cross-Sectional Design method was used to collect the data. Data collection is considered one of the basic parts of research methodology, and research would not be possible without the existence of data in this research. Therefore, collection data is divided into two basic important parts:

First-hand data (primary data), which includes the questionnaire for this research.
Second-hand data (Secondary data): This includes library data, such as books, articles, dissertations, and reputable Internet sites.

The questionnaire of this research includes five basic parts: Demographic information, multiple-choice questions (two-choice), multiple-choice questions (four-choice), multiple-choice questions (five-choice), and finally, descriptive questions.

Agricultural producer selection was done in two (2) districts of the province to collect the required information for the analysis. In the two districts namely, (Kalafgan and Baharag), a multistage sampling technique was used to collect the data. In the present research, we selected 80 respondents randomly for the study (Table 1).

### Table (1): District of respondents

<table>
<thead>
<tr>
<th>S. No</th>
<th>District Name</th>
<th>No. of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kalafgan</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>Baharag</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>80</td>
</tr>
</tbody>
</table>

The above table shows that the respondents in this research include two districts of Takhar, and each district contains (40) respondents.

A multistage stratified random sampling technique was adopted to identify the study area. In total, five villages were selected randomly from each of the two districts (Kalafgan and Baharag) of Takhar province. The sample of 80 respondents includes three categories of the economic situation: low-level (20) people, middle-level (30) people, and relatively high-level (30) people.

The research approach is necessarily considered inductive. That means the approach of inductive research is to reach from the component to the whole and is considered the basis of experimental philosophy. In this approach, though, using partial information and establishing a connection between them infers a general sentence. In this approach, observations are made on specific events in a class, and then inferences are made about all classes based on observations of events or happenings.

Also, in the present study, collected data were analyzed and summarized using descriptive statistical tools, which include frequency, percentage, pie chart, and bar chart.

### 2. Results & Discussion

The analysis of findings in this research includes two basic parts, which are the analysis of the respondents' personal information (Analysis of Demographic Information Findings) and the analysis of the questionnaire information findings, which are discussed below:

#### 2.1 Demographic Finding Analysis

The demographic information of the respondents in the current study includes the options of Age, Marital status, Gender, and literacy level, which are analyzed below:

### Table (2): Statistical demographic information

<table>
<thead>
<tr>
<th>S. No</th>
<th>Indicators:</th>
<th>Parts:</th>
<th>Total</th>
<th>Percentage:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Partial</td>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>1</td>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>20-30</td>
<td>32</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30-40</td>
<td>31</td>
<td>37.75%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>40-50</td>
<td>17</td>
<td>21.25%</td>
</tr>
<tr>
<td>2</td>
<td>Marital Status</td>
<td>Single</td>
<td>19</td>
<td>23.75%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Married</td>
<td>61</td>
<td>76.25%</td>
</tr>
<tr>
<td>3</td>
<td>Gender</td>
<td>Male</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>80</td>
<td>100%</td>
</tr>
<tr>
<td>4</td>
<td>Literacy</td>
<td>Literate</td>
<td>35</td>
<td>43.75%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Illiterate</td>
<td>45</td>
<td>56.25%</td>
</tr>
</tbody>
</table>

Source: Research Findings
The above (Table) indicates the demographic statistical information of respondents, so respondents’ information includes 4 important sections: respondent’s age, respondent marital status, respondent gender, and respondent literacy, which are explained below:

1. **Age**: Respondent years 20-30 include 40%, 30-40 is 37.75%, and 40-50 is 21.25%. Therefore, most of the respondents were between the ages of 20 to 40.

2. **Marital Status**: Single respondents comprise 23.75% of the respondents, and the remaining 76.25% of the respondents were married. So, statistical findings show that most of the respondents were married.

3. **Gender**: The above statistical finding shows that all of the respondents were female.

4. **Literacy**: 43.75% of respondents were literate, and 56.25% of other respondents were illiterate.

### 2.2 Respondents Statistical Findings Analysis

In this section, the statistical findings of the current research are discussed, which are divided into three sections: two-choice findings, four-choice findings, and five-choice findings:

**Table (3) answers the percentage of Yes/No questions.**

<table>
<thead>
<tr>
<th>No</th>
<th>Questions</th>
<th>Indicators</th>
<th>Statistic</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>level of rural women’s interest in processing agricultural products</td>
<td>Yes</td>
<td>80</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>0</td>
<td>%</td>
</tr>
<tr>
<td>2</td>
<td>Earnings from previous work of rural women</td>
<td>Yes</td>
<td>58</td>
<td>72.50%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>22</td>
<td>27.5%</td>
</tr>
<tr>
<td>3</td>
<td>level of satisfaction of rural women with their agricultural products</td>
<td>Yes</td>
<td>80</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>4</td>
<td>Loan payments by government or private institutions to rural women</td>
<td>Yes</td>
<td>28</td>
<td>35%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No</td>
<td>52</td>
<td>75%</td>
</tr>
</tbody>
</table>

*Source: Research Findings*

According to the above information, findings show that all the respondents are interested in the processing of agricultural products. Also, 72.50% of respondents indicated that they were previously engaged in work through which they earned income. Nevertheless, all the respondents are satisfied with their jobs, and many of them, 75%, have not received financial assistance from any public or private institution.

Also, rural women working in the agricultural products sector are discussed below: Number of women working in the agricultural products sector, type of products that can be processed in the respondents’ areas, duration of women’s employment in the agricultural sector, explanation of the processing season agricultural products by women and last reference that women are introduced to this job.

![Number of women working in agricultural products](image-url)
Based on the above figure, it can be analyzed that the respondents identified between 20 to 50 people who are engaged in agricultural activities in their village, and the average is 38 women in each region; this shows that women play an important role in agricultural products. In addition, the figure below shows the types of agricultural products that are processed by the women of Takhar province:

**Figure (2) Types of agricultural products that are processed by women of Takhar province.**

According to the above figure, 2.5% of the two types, 7.5% of the three types, 26.25% of the four types, and finally, 63.75% of the five types of agricultural products were selected. Therefore, most of the respondents’ process five types of agricultural products in Takhar province.

**Figure (3) Duration of women’s employment in the agricultural sector of Takhar province**

According to the above figure, most respondents (57.5% of them) have been doing agricultural jobs for one year. Also, 15% of them have been doing two years, 17.5% of them have been doing three years, and finally, 10% of them have been doing four years.
Table (4) season of the year that Women are doing agriculture work and their institutional encouragement.

<table>
<thead>
<tr>
<th>No</th>
<th>Questions</th>
<th>Indicators</th>
<th>Statistic</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Determining the season of the year in which agriculture work is better done by women.</td>
<td>Spring</td>
<td>9</td>
<td>11.25%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Summer</td>
<td>45</td>
<td>56.25%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fall</td>
<td>24</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Winter</td>
<td>2</td>
<td>2.5%</td>
</tr>
<tr>
<td>2</td>
<td>Institutions where women are encouraged to do their agricultural work.</td>
<td>Government Institutions</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Private Institution</td>
<td>12</td>
<td>15%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Foreign Institution</td>
<td>58</td>
<td>72.5%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>None</td>
<td>10</td>
<td>12.5%</td>
</tr>
</tbody>
</table>

Source: Research Findings

Based on the above figure table, findings show that the absolute majority of respondents (86.25% of Women) harvest their agricultural products in summer and fall. 72.5% of them are encouraged by Foreign Institutions, 15% of them are encouraged by Private Institutions, and finally, 12.5% of them are privately encouraged by other institutions in agricultural work.

Figure (4) Incomes of women from agricultural products in Takhar province.

According to the findings of this study, the respondents have answered the above questions, and about 53% of them are satisfied with their jobs. Also, about 27.5% of them considered that agriculture work is higher than other jobs, while 28.75% consider their efforts in agriculture to be as well as other jobs, and 43.75% of them were less efficient in agriculture than in other jobs.

About 47.5% of respondents can help their families through their agricultural products incomes, while 32.5% % of them can help their families less, and only 20% of them appear to be dissatisfied with the process and do not consider their achievement in agricultural products to solve their family problems.

17.5% of respondents have problems in their product sales, and 41.25% of them have little problems in their agricultural sales sector, so 41.25% of them do not have any problems. Finally, 25% of respondents throughout the year produce relatively good incomes from their products, 43.75% of them have relatively middle incomes, and 31.25% of them are low.
Table (5) Level of agricultural products impact on the economy of rural families.

<table>
<thead>
<tr>
<th>Questions</th>
<th>Indicators</th>
<th>Statistic</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>The level of agricultural products impacts the</td>
<td>So much</td>
<td>8</td>
<td>10%</td>
</tr>
<tr>
<td>economy of rural families</td>
<td>Much</td>
<td>30</td>
<td>37.5%</td>
</tr>
<tr>
<td></td>
<td>So So</td>
<td>32</td>
<td>40%</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>10</td>
<td>12.5%</td>
</tr>
<tr>
<td></td>
<td>So Low</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Research Findings

Figure (5) Level of agricultural products impacts the economy of rural families.

The respondents are satisfied with their agricultural products 47.5% of them agreed that their agricultural products can play a good role in their family's economy, so 40% of them have a moderate view of this, and the rest of them (12.5%) considered their agricultural products are not enough to grow of their family economy. Therefore, we can recognize that agricultural products can impact the economy of rural families in Takhar province.

2.3 Respondents Interview Findings Analysis

Women should organize their financial affairs and life responsibilities by themselves, and to successfully overcome family problems, they should try and achieve economic independence. Also, the women who have been interviewed have suggested that rural women should be purposeful for the progress and development of their families and choose a good future for them with logical goals. They have also suggested that rural women should be freed from dependence on their husbands and family and should play a significant role in solving their family's economic problems. Also, they have suggested that rural women in Takhar province should make use of the available opportunities and invest in the agricultural sectors based on the assistance they receive from private, government, and foreign institutions. In the second question part of the interview, the respondents considered the following important goals of the partner institution in the development of agricultural jobs for rural women:

1. Women achieving independence in all matters, especially economic matters.
2. Getting rid of poverty and unemployment and finding prosperity.
3. Empowerment and capacity building for rural women.
4. Freeing rural women from family violence due to economic problems.
5. Raising the economic level of rural families.
6. Proper use of rural women's labor force for the growth of the local economy.
7. Laying the groundwork for the activation of women in all matters.

3. Conclusion

According to the main objective of the present research, which was to know the employment level of women in rural and their experiences in the field of processing agricultural products, the results have shown that women can play a significant role in the processing of agricultural products in Takhar province, and this makes them useful for the growth of their family's economy.
As quantitative and qualitative findings of the present study show, it can be concluded that the agricultural products of rural women in Takhar province are considered one of the important achievements that provided jobs to not only them but also their agricultural incomes helpful and meaningful. Impact on the economy of their families, means 47.5% of respondents agrees that their agricultural products can play a good role in their family’s economy, so 40% of them have a moderate view for this and the rest of them (12.5%) considered their agricultural products are not enough to grow of their family economy. Therefore, we can recognize that agricultural products can impact the economy of rural families in Takhar province.

According to the experiences of current research, the following recommendations can be important:

1. Removing the restrictions placed on women by the government;
2. Financial support by donor institutions for scientific research in the field of rural women's activities in agriculture;
3. Laying the groundwork for more women's activities in agricultural work by the government and aid institutions;
4. Creating better opportunities for female private entrepreneurs;
5. Creating suitable fields to improve the capacity of rural women in the agriculture sector;

4. Limitation of the Study
The limitations of the present research are as follows:
1. Insufficient information about the respondents for the current research questions;
2. Lack of real cooperation by Information organizations for women researchers;
3. Existence of special restrictions for distributing the questionnaire in the statistical population of this research.
4. Existence of social limitation by the current government for women's activities;
5. Lack of valid sources (second-hand sources) in the section of (library).

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