



# Economic Analysis of Textile Industry and Its Contribution to Household Income: Case Study of Nangarhar Province

**Assistant Professor Enayatullah Habibi, Assistant Professor Akhtar Mohammad Ghani**

Senior Lecturer and Head of BBA Department of Economics Faculty in Nangarhar University – Afghanistan

**Add:** Daroonta, Nangarhar University – Afghanistan

Senior Lecturer in Economics Faculty of Nangarhar University – Afghanistan

**Add:** Daroonta, Nangarhar University – Afghanistan

## Abstract

The purpose of the study is to determine the contribution of the textile industry to the household income and to determine the problems confronted by textile industry in Nangarhar province. The results of the study indicate that the textile industry is in a challenging situation, it means the lack of infrastructure, lack of financial resources, lack of skilled labors, lack of security, suitable technology and marketing problems are considered to be the key challenges to the development of the industry. Furthermore, the study indicates that the effects of income from textile industries on the total household income of the targeted population are statistically significant. It means that textile industry is one of the main factors affecting the total income of the households in the target area. Textile industry is a fundamental source of income generation and employment in the study area.

The study is based on both primary and secondary data. The primary data is collected from the textile industries that are active in the chosen area and the secondary data is collected from various related valid sources, such as World Bank reports and other national and international donors' valid sources. To collect the primary data, Nangarhar, province was chosen. Nangarhar province has twenty-two districts, from them, five districts of Nangarhar which are Behsud, Jalalabad, Batikoot, Kama and Rodat districts has been selected for the study. According to existing information, Nangarhar is one of main locations of textile industries, the study includes a sample of 50 target population in Nangarhar Province as 10 textile firms were studied in each of the five districts, each of them was randomly chosen for interview from the list.

**Keyword:** Textile industry, income contribution, Household income

## Introduction

Textile products is the basic need of human being, the demand for textile products is increasing in the world about 18 trillion USD dollars and it is projected to increase by 6.5% (Spinanger 1995). The Asian countries are the main providers of the textile products to the United State of America, European Union and many other countries in the world (Spinanger 1995).

The Afghan government invested in textile sector in all Afghanistan specially Herat, Nangarhar, Balkh, and Kandahar provinces in (1350s/1970s). These factories satisfied the domestic need of the people and also they enabled to export textile products to foreign countries(MCI,2013).

Nangarhar has a long history in production of textile related products such as cloth, towels, caps, socks, turbans, sweaters, blanket, shawls and etc. Specific districts of Nangarhar that are Kama, Rodat, Batikoot, Jalalabad and Behsud are the five leading areas for such operations in the province.

It is a well-known fact that Afghanistan is devastated by the three decades' war and its entire property has been destroyed and damaged. More than three decades' war in Afghanistan has resulted in entire destruction of factories, country infrastructure, economy of the people and many more. The war also greatly affected the pre-existence businesses of textile in Nangarhar and resulted in tremendous decrease in job opportunities and affected in high market decrease for cotton and wool both produced locally in Afghanistan.

Nangarhar province alone has more than hundred factories of textile that are using manual old age machinery operated by hand and are producing varieties of products. A leading business in this areas resulted in cultivation of cotton on in the nearby districts by the local farmers because there was a direct local market. It was found out that the people of the nearby areas were heading toward the specific villages and were working as full time employees where they were earning income for their livelihoods and at same time they were learning the related skills as well.

The producers had an outstanding market for their products in the local provincial markets of the Eastern Region and as well as in the markets of Mazar-i-Shareef, capital Kabul and Herat provinces. Afghanistan has a long history in having Mila (picnics) in various parts of Afghanistan on some specific occasions. The producers used to carry their finished products from their localities to various picnics and were used to return home with satisfactory income.

Due to the war and political instability some of the skilled individuals of this business have migrated to neighboring countries and started working in Iranian textile companies and some of them who had capital initiated their own factories. Most of the people started factories in partnership with Pakistani people in Pakistan. After the establishment of new government in 2001 most of the afghan textile investors returned to the home country and restarted the textile business in Afghanistan and received little assistance from international organizations.

With support of this sector, there are significant opportunities that will result in creation of new jobs on the ground. New operations also contribute in decreasing of importation of certain textile products from abroad and provide direct local market for cotton and wool.

The machinery which was used 30 years ago was manual and was used to operate by hands. Currently machinery that operates by electricity is available and some people opted to use this as well.

Nangarhar is the host of more than 200 textile small factories operating by private owners. Which are producing cloth, towels, caps, socks, turbans, sweaters, blanket, shawls and other products which are having outstanding market.

Over 70% of the subsector players have been active in this business for more than 20 years and they have got tremendous experience to run a modern type of textile factory and get a big share of the current market both in Nangarhar and in Peshawar.

As Textile sector play an important role in the economic growth of a country, so taking it in account we intended to conduct a research to know about the constraints and profitability of the textile industry, contribution of income to household total income and empowering aspect of the sector in Nangarhar province of the country to provide a plate form for the future in this sector.

The study is conducted on accurate norms related to the importance of the textile sector which will guide international donors to have a better understanding about textile industries in the area for the future investment. As in this sector no significant study has taken place, so the study will give clear image of textile sector in the province.

The worldwide textile industry practices an important element of world trade flows, mainly for developing countries where textile weaving accounts a big part of aggregate exports. According to the WTO the world total textile exports has value at \$195bn, it represents 2.2% of total world goods trade (WTO, 2006).

The world textile products remained valued at Developing countries producing half the world's textile exports and nearly three-quarters of the world's clothing exports (UNCTAD, 2005).

The structure of textiles investment is tending to be a labor-intensive practice, and typically it can provide job opportunities for many people (UNCTAD, 2005). The European community is the largest exporter of textile products in the world, On the other hand, Indonesia, India, Pakistan, Turkey, Thailand and Mexico all these countries are ranked between the top 15 textile exporters in the world(WTO,2006).

Generally, the Asian countries account for 45.1% of world textiles exporters in 2004. The European Union and the United States are the largest importers of textiles products (WTO, 2006).

Afghanistan is one of the developing countries. Several years of civil war and political instability and lack of security have left the country in ruins, and the economic activities of the population depend on agriculture sector (Afghanistan Central Statistic Organization, 2017).

Dr. Kenneth et al (2003) has shown that the production of cotton had reached 350,000 MT on 188,700 hectares of land in 1983 in Afghanistan. In 2003, it is projected that 30,000 MT cotton was produced on 46,960 hectares' land. In the 1970s and 1980s, lint cotton was used by internal textile

factories and moreover the cotton products exported in quantities that considerably had contribute to foreign exchange earnings in Afghanistan.

After the establishment of new government in 2001, Afghanistan are producing enough textile products including cloth, towels, caps, socks, turbans, sweaters, blanket, shawls and etc., as well as to create a surplus for export. In Afghanistan, the industry is also based on agriculture. The major industrial crops are: cotton, tobacco, madder, castor beans, and sugar beets. The textile sector is one of the important sectors which benefits the people through improving the sector's contribution to income generation, create employment opportunities and empowers the economy through foreign exchange earnings of its exports (ALP/E, 2007).

The textile sector is playing a substantial role in economic development of Afghanistan specially in Nangarhar province. It is the biggest labor intensive industrialized sector of economy, which employs many people in the sector.

The textile sector creates important economic activities to the rural communities and is a major source of livelihood for many people. People of the Nangarhar province are poor and mostly their source of income depends on agriculture. Textile production could be an important subsidiary element for the people. Currently, the demand for textile production is increasing and its rate of supply is decreasing due to the less textile industries inside the country, now a-days around 70% textile production are being imported from foreign countries with high price and low quality (Afghanistan Central Statistic Organization, 2017).

There is a huge demand for local products to fulfill the local demand in Nangarhar. There are around 200 textile factories in Nangarhar province that producing textile products and the textile sector provides job opportunities for local people due to the labor intensive form of the enterprise.

## **1. Statement of the Problem**

The textile industry has the potential to contribute significantly to the national economy through poverty reduction and employment creation. The textile sector provides important economic activities to rural communities and can be a major source of livelihood for many people of local communities. Recently, textile industry have become a rapidly developing enterprise along the other sectors in Nangarhar province.

Large numbers of textile firms were established in last few years in different parts of the province with support from international donors by providing technical and financial support to the textile weavers, which created employment opportunities to the local people. As there are many opportunities of investment in the province related to this sector but its ground base profitability is still a question for many interested people of this sector, so an effort has been made through this research to find out about the profitability of the textile industry in the province. In addition, the research would also focus to ascertain the contribution of the textile industries to the household total income as this aspect of the sector has also been remained as a major question for the interested investors.

## 2. Purpose of the Study:

. This study is designed in accordance with the following specific objectives:

The main objectives of the study are as follow:

- To determine the main challenges of textile industries in Nangarhar Province
- To determine the contribution of textile industries output to the total household income

## 3. Research Questions:

The direct research questions that the study is planned to answer are as follow:

1. What are the problems of textile industries in Nangarhar province?
2. What is the contribution of textile industry output to the total households' income?

To answer the upper mentioned research questions, different methods have been followed that are briefly explained in the coming section. The study is conducted on accurate norms related to the importance of the textile industry which will guide international donors to have a better understanding about textile sector in the area for the future investment. The study will give clear image of textile sector in the targeted area.

## 1. Theory, Methods and Procedures

The study involves both qualitative and quantitative methods to answer the research questions. The research is conducted in Nangarhar province. It include five districts in Nangarhar province which are Behsud, Jalalabad, Batikoot, Kama and Rodat, so we only rely on the sample base random selection of the mentioned districts of the province.

The study use both primary and secondary data. The primary data is collected from the textile industries that are active in the chosen area and the secondary data is collected from various related valid sources, such as World Bank reports and other national and international donors' valid sources. There is a database in the ministry of Commerce and trade; the database includes all the related data regarding the activities related to various businesses such as marble, textile, trade and many others. To collect the primary data, Nangarhar, province has been chosen. Nangarhar province has twenty-two districts, from them, five districts of Nangarhar which are Behsud, Jalalabad, Batikoot, Kama and Rodat districts has been chosen for the study. According to existing information, Nangarhar is one of main locations of textile industry, so we had a sample of 50 target population in the Province as 10 textile industries have been studied in each of the five districts, each of them was randomly chosen for interview from the list.

different analytical statistical tools were chosen to analyze the data as they include: frequency distribution tables, percentages, mean and regression technique.

For this purpose, budgetary technique and multiple Regression technique were used.

The multiple regressions technique was used to determine the contribution of textile industry to the total households' income as is shown in the below model:



$$Y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + e$$

Where:

Y Total household income

$x_1$  Textile industry income

$x_2$  Wage income

$x_3$  Beekeeping farm income

$x_4$  Business income

$\beta$ s are regression coefficients

e Error term

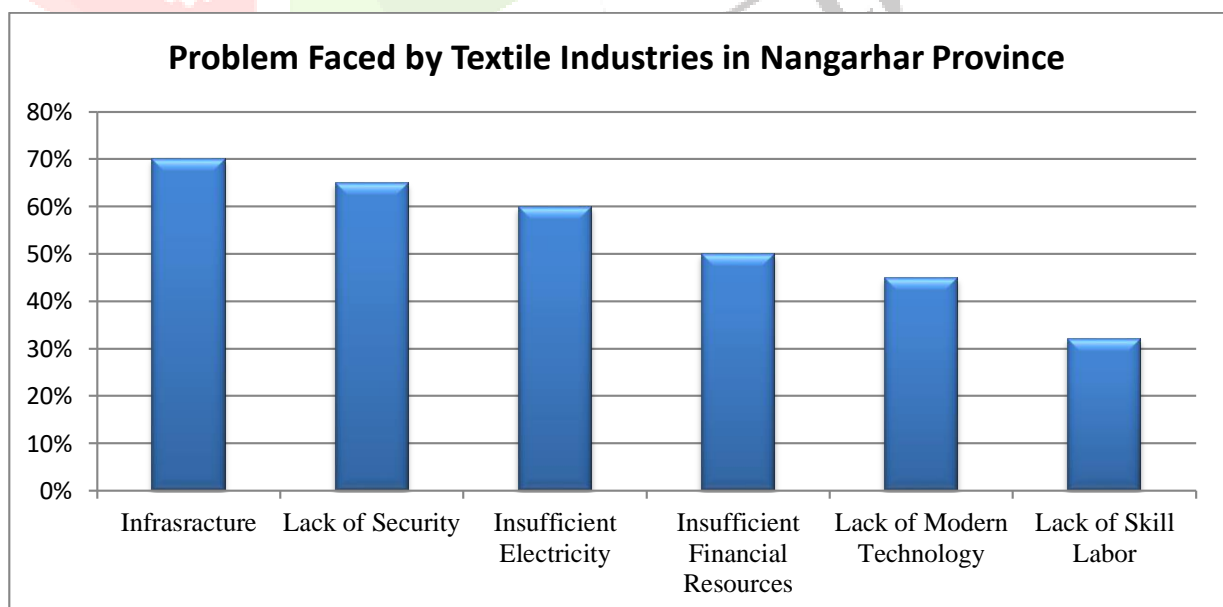
All the monetary measurements are indicated in Afghanis.

## Results

The Textile industries play important role to the domestic economy through employment, increase local products and poverty reduction. Textile industry is known as one of the major economic activity for any economy specially a developing economy and can be the main source of revenues for many people. Newly, textile industries have become a rapidly developing enterprise in the province of Nangarhar.

After 2001 large numbers of textile firms have been established in Nangarhar province with the direct financial and technical support of international donors and NGOs. Recently, textile industry in the province have been facing many challenges such as the lack of infrastructure, security, insufficient electricity and insufficient financial resources. Details of each key challenge are extracted as below.

**Figure 1.1 Problem Faced by Textile Industries in Nangarhar Province**



**Source:** Researcher field survey, 2020

The result indicates that 70% of the textile industries faced with the problem of infrastructure. Moreover, for 65% of target population the lack of security was considered a main challenge for

textile industries in the province. Furthermore, 50% of the textile industries said that the lack of sufficient capital is a key problem for them, and 60% of the respondents said that the lack of sufficient power energy is the core challenge to the development of the textile sector. Furthermore, 45 % of respondents said that the lack of modern technology is the key problem for textile industries, and for 32% of target population the lack of skilled labors is the key challenge for this sector.

In order to determine the contribution of textile industries to household income, the effect of a set of independent variables on total household income was assessed using regression. The independent variables were Textile Industry Income, wage income, Beekeeping Farm Income, and business income. Total household income, indicated with Y, was chosen as the dependent variable in this model.

The following multiple linear regression model was used to analyze the findings:

$$Y = b_0 + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + e$$

**Table 1.1 The R Square and Model Fit Details**

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.774 <sup>a</sup>	0.471	0.441	289.83653
<sup>a</sup> Predictors: (constant), business income, beekeeping income, wage income, textile industry income				

**Source:** Researcher field survey, 2020

Table 1.1 shows that the R square is 47.1%. This indicates that the independent variables are only associated with 47.1% of the changes in the dependent variable. The model denotes that 47.1% of the total household income is associated with the independent variables. In other words, the data used in the model is only responsible for 47.1% of the variation in the dependent variable, and the rest of the variation is related to the factors that are not included in the model.

**Table 1.2 Regression Outputs**

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	227.365	119.431		1.939	0.056
	(X1) Textile Industry income	0.716	0.131	0.335	5.525	0.022
	(X2) Wage income	0.152	0.270	0.044	0.516	0.308
	(X3) Beekeeping income	0.332	0.336	0.064	1.984	1.328
	(X4) Business income	1.217	0.162	0.377	7.332	1.338
Dependent variable: total household income						

**Source:** Researcher field survey, 2020

The coefficients in Table 1.2 are associated to four variables (textile industry income, wage income, beekeeping income, and business income) that have impact on the total household income. The coefficient of textile industry income is 0.022, and the coefficient of wage income is 0.308. It indicates that the effects of income from textile industry and wage income on the total income of the targeted households are statistically significant. It shows that textile industry is a major factor that impacts the incomes of these households.

In addition, beekeeping income and business income are not statistically significant, it means any variation in household income related with these variables might be attributed to randomness.

## Discussion & Conclusion

Fifty households related to textile industry were directly interviewed by questionnaire in the target area. These households were selected randomly. The results of the research shows that 70% of this population mentioned the infrastructure as a major problem in the industry, and 65% of the respondents thought the lack of security is a key obstacle towards maintaining their day to day activities. In addition, 50% of the target population indicated that the lack of sufficient capital is a major problem for them, and 60% of the respondents said that the lack of sufficient power energy is the key challenge to the development of the industry. In addition, 45 % of respondents said that the lack of convenient modern technology is the core problem for industry, and for 32% of the respondents insufficient skilled labors is the key challenge in the sector.



The study found that the coefficient of textile industry income is 0.022, and the coefficient of wage income is 0.308. It shows that the impact of income from textile industry and wage income on the total income of the targeted households are statistically significant. It means that textile industry have major impact on the incomes of these target households.

In addition, beekeeping income and business income are not statistically significant, it denotes that any deviation in household income related with these variables might be endorsed to uncertainty.

Moreover, the results show that 47.1% of the total household income is related to the independent variables in the subjected model. It means that the data in the model is only 47.1 percent responsible for the variation in dependent variable and the rest of the variation in the model is due to the indicators that are not part of the model.

## References

- 1-The official statistics at the provincial level is 4.2 million. Afghan Central Statistics Organization (CSO), Statistical indicators in the Kabul Province: 2015–2016 (CSO: Kabul, May 2016).
- 2 -Alternative Livelihood Program East (survey conducted in March, 2007).
- 3- Olukosi, J.O and P.O Erhabor, 1988. Introduction to Farm Management Economics: Principle and Application. Pub. Ltd., Zaria.
- 4- Hayashi, Michiko, " Weaving a New World: Realizing Development Gains in A post –ATC Trading System", UNCTAD/DITC/TNCD, 2005.
- 5- UNCTAD, " Strengthening Participation of Developing Countries in Dynamic and New Sectors of World Trade: Trends, Issues and Policies ", 2005.
- 6- World Trade Organization, "Resolution of NTBs through a Facilitative Mechanism: Submission by NAMA 11 Group of Developing Countries", 2006.
7. Spinanger, D. 1995. The Spillover of Export Capabilities in the Textile and Clothing Industry: The Case of Hong Kong. In G. B. Navaretti et al. (ed.), op. cit. 237–249
8. Ministry of commerce and industry of Afghanistan (survey conducted in March, 2013).
9. Christensen, C. Roland, Kenneth R. Andrews, Joseph L. Bower, Richard G. Hamermesh, and Michael E. Porter. Business Policy: Text and Cases. 5th ed. Homewood, IL: Richard D. Irwin, 1982.