



Research Paper

## Analyzing the Value Chain of Sericulture activity in Rural Areas of Ramyan County

Bahman Sahneh <sup>a\*</sup>, Hossien Sadin <sup>b</sup>, Fatemeh Jahedi <sup>c</sup>.

<sup>a</sup> Department of Geography, Faculty of Humanities and Social Sciences, Golestan University, Gorgan, Iran

<sup>b</sup> Department of Geography, Faculty of Humanities, Tarbiat Modares University, Tehran, Iran

<sup>c</sup> Department of Human Geography, Faculty of Geography, University of Tehran, Tehran, Iran

### ARTICLE INFO

#### Keywords:

Rural Business,  
Sericulture,  
Value Chain,  
Rural Areas,  
Ramyan County.



#### Received:

04 April 2022

#### Received in revised form:

10 June 2022

#### Accepted:

06 August 2022

pp. 45-64

### ABSTRACT

The production of silk by mass breeding is considered a major economic activity in many developing countries. In order to develop this activity, special attention must be given to how the production, processing, trade, and final consumption systems function. It is proposed that a value chain model can be used to activate this type of business to increase productivity and achieve competitiveness. The objective of this study was therefore to examine the value chain of sericulture activity in rural Ramyan County. The study is applied as a descriptive-analytical study that uses purposeful and numerical methods as the basis for selecting samples and collecting data. The statistical population for this study consists of 103 activists from the sericulture business of Ramyan County. A researcher-made questionnaire based on a Likert scale was used to evaluate the performance of the components. The questionnaire's validity was confirmed by professors and experts, and its reliability was confirmed by Cronbach's alpha coefficient of 0.897. A statistical analysis was performed in the SPSS software environment and a map was prepared using ArcGIS software. The results of the research on the value chain components of sericulture activity show that the policy-making and infrastructure sectors of this business in the region, which scored 8.5 and 2.57, respectively, have the best and poorest performance as part of the value chain. From the perspective of the average points in different parts of the value chain, we can say that this business is at the beginning of the development stage of this activity.

**Citation:** Sahneh, B., Sadin, H., & Jahedi, F. (2022). Analyzing the Value Chain of Sericulture activity in Rural Areas of Ramyan County. *Geographical planning of space quarterly journal*, 12 (2), 45-64.

<http://doi.org/10.22059/JURBANGEO.2022.325283.1535>

\* . Corresponding author (Email: [b.sahneh@gu.ac.ir](mailto:b.sahneh@gu.ac.ir))

in Ramyan city based on the natural characteristics of the area.

## **Extended Abstract**

### **Introduction**

The production of silk by mass breeding is considered a major economic activity in many developing countries. In order to develop this activity, special attention must be given to how the production, processing, trade, and final consumption systems function. It is proposed that a value chain model can be used to activate this type of business to increase productivity and achieve competitiveness. The objective of this study was therefore to examine the value chain of sericulture activity in rural Ramyan County.

### **Methodology**

This research is applied in terms of purpose and in terms of descriptive-analytical method, which has been investigated using the Porter model value chain of Sericulture activity. In the wake of identifying the criteria and items explaining the value chain of Sericulture activity, a questionnaire was developed in two parts (main and support). As a first step, the validity of the questionnaires was determined with the help of 20 university professors in Golestan province with backgrounds in government, marketing, economics, rural and urban planning, and its reliability was determined using Cronbach's alpha with a coefficient of 0.897. The questionnaires were filled out by 103 activists in the breeding industry after the research process. In the SPSS software environment, Friedman statistical tests and Spearman correlation were used for data analysis. Furthermore, ArcGIS software was used to develop a spatial distribution map of activists in the Sericulture industry

## **Results and discussion**

Up to 99% confidence level, the value chain components, such as human resource management, business infrastructure, supply (input), product distribution, and up to 95% confidence level, such as production and legal policy, are significantly associated with sericulture activities and this relationship is between 0.196 and 0.611. Accordingly, this kind of activity depends on small changes that occur at every stage of the value chain and requires careful planning, skills, and effective transformation mechanisms in the public and private sectors. Results are also presented of the interactions between the value chain components of Sericulture activity, and as can be seen, the highest score is given to the policy component with a numerical average of 8.5 and a coefficient of variation of 0.1805 and the lowest score with a coefficient of 2.57 and a coefficient of variation of 1.0345 goes to the infrastructure component for Sericulture. In this sector, one of the most important and significant aspects is the proper performance of human resources management departments and the availability of inputs of the inputs activity as well as poor performance of inputs in the region. Additionally, based on the data of the final value table of the value chain, the value is estimated to be 6.03. From this, we can conclude that this business (in light of average scores in various sectors) is at an early stage of development.

## **Conclusion**

Complementary home-based businesses are a tool for economic growth, reducing unemployment and creating new job opportunities. In many countries, especially developing countries, launching and developing them is considered a strategic approach. The objective of this article is to provide a basis for Sericulture business development with a value chain approach so that we can better understand the realities of the production activities in rural areas of Ramyan County. According to the research conducted in this field, the Sericulture activity, with its native nature

and unique features, has been able to serve as a sufficient source of income, along with other activities, for the residents of rural areas. This study suggests that diversifying rural economic activities and using local resources to develop rural areas can be new capacities for rural development. Moreover, based on the data in the tables from the value chain analysis of Sericulture activity, it was determined that the activities related to the infrastructure and operational components of Sericulture activity in the region with scores (2.57 and 3.5) are in the simplest form and represent the beginning of Sericulture activity development. In this regard, identifying shortcomings and paying attention to these areas seems important. On the other hand, when considering the importance of domestic consumption of goods, indigenous technology and knowledge, the ability of different economic sectors, as well as the cooperation of local, regional and national institutions, the policy-making sector with 8.5 points and human resource management with 7.94 points were found to demonstrate the best performance. As a result of the value chain analysis, it can be determined that by including the business development process in the model, it is possible to categorize the various processes, actions and activities of the businesses in order to accurately understand their assets, assets, and the process of converting them into results. It should be noted that other researchers have used this model to analyze

rural businesses and confirmed its usefulness. Its importance is explained theoretically, and empirical studies have demonstrated its fundamental role in improving a business. As studies have shown, value chains as a central technique in analyzing the activities of any business while identifying and categorizing them, enable manufacturers to create individualized products tailored to the needs and desires of customers and materials Use quality and primary quality. As a general principle, value chain analysis can be used to improve the business processes in Sericulture in the study area, providing a relatively good source of income for rural households if legal, infrastructure, and operational contexts are provided.

#### **Funding**

There is no funding support.

#### **Authors' Contribution**

Authors contributed equally to the conceptualization and writing of the article. All of the authors approved the content of the manuscript and agreed on all aspects of the work declaration of competing interest none.

#### **Conflict of Interest**

Authors declared no conflict of interest.

#### **Acknowledgments**

We are grateful to all the scientific consultants of this paper.

