Role of Innovations in Development of Silkworm Enterprises` Marketing

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Abstract. **In this paper has been investigated role of innovations in development of silkworm enterprises` marketing. The author studied the question of the development of sericulture and its features. A cross-sectional and comparative analysis of the influence of various factors on the growth of efficiency in sericulture through the introduction of technologies has been carried out.**

Keywords: Enterprises` marketing, sericulture industries, resources, efficiency, contractual relationship, innovations.

1. INTRODUCTION

In the current era of highly developed science, technology and technology, the demand for natural fabrics is increasing year by year in the world market, and the world silk industry and science are led to the cultivation of mulberry varieties with high nutritional value and the creation of breeds and hybrids suitable for different seasons of the changing external environment. In recent years, in the Republic of Uzbekistan, the practice of rearing mulberry silkworms several times a year has been used. However, there are no breeds and hybrids suitable for the hot summer conditions of our country, based on this, scientific research has been started in the direction of creating heat-resistant breeds at the Silk Research Institute. In this article, the results of the breeding of 6 breeds and 4 different industrial hybrids of mulberry silkworm under hot conditions are described. Based on preliminary data, Line 1 and Line 2 systems were found to have high embryonic and post-embryonic viability under hot summer conditions. However, the average cocoon weight of these systems was 1.68-1.73 g, cocoon shell weight was 339 mg, and cocoon silkiness was 19.6-20.2%. Based on the obtained results, it was concluded that Line 1 and Line 2 systems can be used as initial selection material for creating heat resistant breeds.

Marketing innovations - implemented new or significantly improved marketing methods, covering significant changes in the design and packaging of products, the use of new methods of sales and presentation of products (services), their presentation and promotion to sales markets, the formation of new pricing strategies. Marketing innovations are aimed at better satisfying the needs of consumers, expanding their composition, opening new markets in order to increase sales.

Product design changes that are part of a new marketing concept refer to changes in the shape and appearance of a product that do not affect its functionality or user experience. They also include changes in packaging, which for products such as food, drinks, detergents, is decisive for their appearance. The use of new methods of sales and presentation of products is related to the expansion of sales and does not include logistics methods (transportation and storage). The use of new methods of presentation and promotion of products (services) means the application of appropriate new concepts. Innovation in pricing involves the use of new pricing strategies to trade the firm's products and services.

Seasonal, regular, or other ongoing changes in marketing tools are generally not marketing innovations.

It is necessary to distinguish between marketing innovations and product, process innovations. The main criterion for differentiation is the presence of significant changes in the functions or ways of using the product. Products or services that are significantly improved in functionality or use over existing products are product innovations. A change in the design of an existing product is a marketing innovation, not a product innovation, unless its functional or user characteristics have changed significantly.

Marketing innovations may be new to the organization, but it does not have to be the first to introduce such innovations. It also does not matter whether the marketing innovations were developed by the organization itself or by other organizations.

2. LITERATURE REVIEW

Examples of marketing innovations include the following: introduction of significant changes in the design of products and services (excluding routine/seasonal changes), packaging; implementation of a new marketing strategy focused on expanding the composition of consumers or markets; application of new techniques for promoting products (new advertising concepts, brand image, methods of marketing individualization, etc.); use of new sales channels (direct sales, Internet

The material was prepared by I.A. Kuznetsova trade, licensing of products and services); introduction of new

concepts for the presentation of products in trade (eg showrooms, websites, etc.); use of new pricing strategies when selling products and services.

Organizational innovations - implemented new methods of doing business, organizing jobs, external relations. They are aimed at improving the efficiency of the enterprise by reducing administrative and transaction costs, increasing employee satisfaction with the organization of jobs (working time), gaining access to assets that are not on the market.

Innovation in doing business means the implementation of new methods of organizing business activities. These include: developing and implementing a new or significantly changed corporate strategy; introduction of modern methods of organization management (based on information technology); development and implementation of new or significantly changed organizational structures; innovations in the use of shift working hours; application of modern quality control systems, certification of goods, works, services; introduction of modern systems of logistics and supplies of raw materials, materials, components ("just in time", etc.); creation of specialized divisions for scientific research and development, practical implementation of scientific and technological achievements (technological and engineering centers, small innovative firms); implementation of corporate knowledge management systems; implementation of personnel development measures (organization of corporate and/or individual training, creation/development of structures for training and advanced training of personnel); implementation of new forms of strategic alliances, partnerships and other types of cooperative relations with product consumers, suppliers, Russian and foreign manufacturers; transfer of a number of functions and business processes to a specialized contractor (outsourcing).

3. ANALYSIS AND RESULTS

Sericulture is the process of growing silkworms and producing silk from them. Caterpillars of the domestic silkworm are the most commonly used silkworm species in sericulture. Other types of silkworms are also farmed for the production of "wild silk".

Silk is a fiber made up of two different proteins, sericin and fibroin. Approximately 80% of the silk fiber consists of fibroin, which is concentrated in the core. This core is surrounded by a layer of sericin (which makes up the remaining 20% of the silk).[5]

Sericulture in the conditions of Uzbekistan is one of the oldest branches of agriculture. It gives a textile raw material - silk thread, which is highly valued because of the special qualities that determine the use of silk in everyday life and technology. Uzbekistan ranks fourth after China, India and Japan. At present, a transition is being made: from market relations, the forms of production in agriculture are being improved, including in sericulture. Unfortunately, sericulture is characterized by seasonality and short duration. Grena incubation takes 15 days, feeding of silkworm caterpillars - 35-40 days, and with high-speed feeding this period decreases. Carrying out repeated feeding allows you to extend the working season and get an additional crop of cocoons. Reducing the cost of silkworm cocoons is an important condition for increasing the profitability of sericulture. The cost of cocoons, like any product, consists of the total cost of production costs: grain, pesticides, fertilizers, mulberry leaves, depreciation of equipment. The efficiency of sericulture can be significantly increased by improving the organization of harvesting and improving the quality of products. Of all the variety of factors for increasing the efficiency of production of silk cocoons, the acceleration of scientific and technological progress and the comprehensive industrialization of production, and the improvement of the management mechanism are of particular importance.

There are also many problems in the world sericulture. These are periodic ups and downs in demand for products made from natural silk, as well as a low level of mechanization of labor-intensive processes. The main producer of cocoon raw materials - China, does not have serious technical means for the main technological processes. However, the unique industriousness of the Chinese, high-quality, strict implementation of technological requirements, allows them to maintain world leadership in the production of cocoons and raw silk. The situation is the same with mechanization in Korea, Vietnam, India, Bulgaria, etc. [2]

Fig.1. The Complete Process of Rearing of Silkworm for Silk [11]

This is another prerequisite for the need for the widespread introduction of the equipment created by us and the improvement of technologies, the management of innovative processes in sericulture, which will allow us to compete favorably with other countries. Works aimed at improving the technology of sericulture processes through the widespread introduction of integrated mechanization and automation will reduce labor costs and improve product quality. [3]

More attractive mechanized work will reduce staff turnover and give impetus to a more efficient use of the achievements of scientists in sericulture. Naturally, at the initial stage, silkworm breeding will require significant costs. But only in this case, the farmer can get a significant profit. In the first year of operation, it will be less, but over time, the funds invested in the business will pay off. At the same time, it must be remembered that the more accurately all the necessary operations for breeding silkworms are carried out, the better the result, the more caterpillars curled the cocoon, the higher its grade and the greater the yield. Since feed, namely mulberry leaves, plays an important role, reducing the amount of feed consumed per unit of production contributes to a significant reduction in the cost of cocoons. Skillful distribution of the leaf makes it possible to reduce its quantity, and compliance with the rules for its harvesting preserves the fodder value. Fertilization and disinfection are not only additional costs, but also a real opportunity to increase the yield of silkworm cocoons and increase the profitability of production. Naturally, you need a skill that comes with experience. Accuracy, diligence can partially compensate for the lack of experience of a novice silkworm breeder. At the present stage of development of sericulture, silkworm breeding is becoming predominantly the occupation of farmers. A family of three or four people, having a converted premises of 80 m2 and 2 hectares of mulberry plantations, is able to get 500 kg of silkworm cocoons for five rearings without outside help. If, however, for the preparation of fodder to resort to the labor of hired workers, then the yield will increase. It will increase the profitability of production and the use of premises (for example, a film worm farm) for other purposes during the period when the silkworm breeding season has passed.[7]

The integration of agriculture with the processing industry has not only economic but also social significance. It contributes to a more complete use of potential opportunities, an increase in employment, the emergence of additional sources of income, a sharp reduction in product losses, which is constantly more than 20-35/2 of the total amount of production.[8]

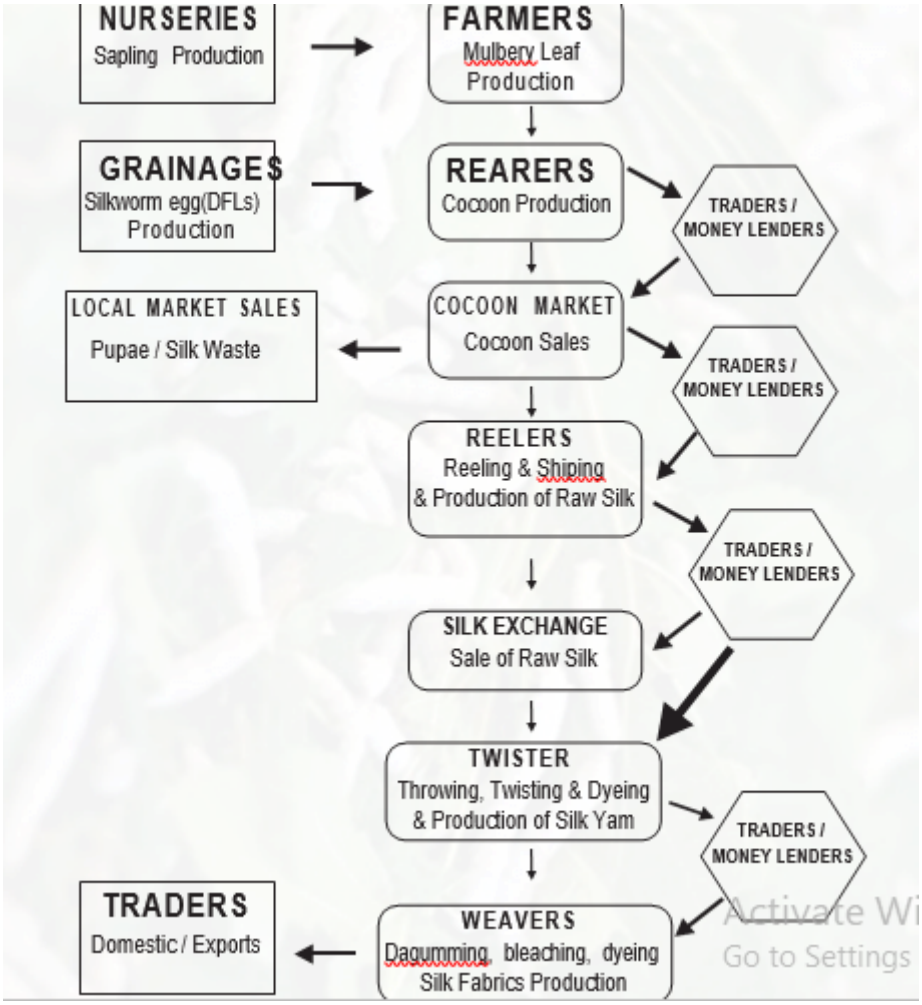

Fig.2. Commercialization of Sericulture Technologies and Innovations [12]

The study allows us to draw the following conclusions and suggestions aimed at improving the efficiency in the management of sericulture: in contrast to other branches of agriculture, sericulture is characterized by a short production period. The feeding of the silkworm lasts 25-36 days and the final product - a silk cocoon - is obtained on the 36-41st day from its beginning. This specific feature of silkworm rearing makes it difficult to transfer it to an industrial basis and hinders the specialization of the industry. More than 85% of silkworm rearing is carried out in the houses of farmers, almost no mechanization of labor-intensive processes was used;[5]

Uzbekistan has significant potential for rearing cocoons, production of raw silk and silk fabrics; for the full revival of silkworm caterpillars, it is necessary to provide the necessary amount of high-quality feed. If the productivity of mulberries in the republic is increased by 3-4 times, i.e. up to 100 c/ha, then for those currently being sold. 500-620 thousand box greens are enough for 55-60 thousand hectares of plantations. To strengthen the fodder base of sericulture, it is necessary:[4]

- reconstruct old plantations and establish only plantations of intensive type;
- comply with the agrotechnics of cultivation, which is possible only on plantations and already with the use of mechanization;
- set the service life of linear plantations up to 40 years, plantations - up to 20 years, depreciation rates - 2.5 and 5%, respectively.
- The maximum efficiency of the material incentive reaches, firstly, when it corresponds in its level to the resource potential of the economy, and secondly, when it is closely related to the final results of production. In the field of material incentives, it is important to ensure that wages are dependent on the result of work and thereby create real advantages for those who work better;[1]
- that farms that sell their cocoons to silk-winding mills should carry out all the calculations themselves. To do this, they need to draw up an agreement at wholesale prices with a silk-winding enterprise at the beginning of the year and, on this basis, carry out the sale of cocoons;

- successful achievement of strategic goals and objectives to ensure efficiency in sericulture in general requires the implementation of a number of organizational and legal measures to manage innovation processes in this area;
- formation of an effective regulatory framework to accelerate the modernization and improve the quality of sericulture;
- stimulating the growth of the innovative level of producers to modernize and improve the quality of silk production;
- formation of the investment system;
- improvement of technology certification, according to the world market standard. In order to increase the efficiency of sericulture, a transition from extensive to normal, intensive and high technologies is necessary, which will make it possible to improve the quality and profits of producers.

4. CONCLUSIONS

The breeds of silkworms that are used today are descended from wild silkworms that lived in the mild climate of China. Although silkworms have been domesticated for more than 5,000 years, different breeds and hybrids show varying levels of viability and productivity in different regions. Because of this, each genotype has a different response to stress factors of the external environment. In particular, it is important for the theory and practice of breeding to adapt breeds to the hot climatic conditions of Uzbekistan, especially to the dry conditions of summer, and to select strong genotypes from their population.

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