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## Entrepreneurial Strategies of Enhancing Competitive Advantage of Medicinal Herbs in Ilam Province, Iran

Mohammad Jasemi <sup>1</sup>, Homayoon Moradnezehadi <sup>2\*</sup> and Mohammad Salavarz <sup>3</sup>

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### Abstract

Finding new ways to compete in competitive markets is the essence of strategic thinking and marketing strategy. This issue has always been addressed by the experts and scholars of economics and management over recent decades. In this regard, the present study explores the entrepreneurial strategies to gain a competitive advantage in Ilam Province medicinal plants. This study employed a mixed-methods research paradigm. In the qualitative part, Delphi method and in quantitative part the Analytic Hierarchy Process was used. The population in the qualitative part comprised experts in the fields of marketing, entrepreneurship and herbs in Ilam Province that among them 12 participants were selected using purposive sampling methods. In the quantitative part, the population included 33 experts in the field of medicinal plants which were studied by census method. The data were collected using a paired comparison questionnaire and analyzed by Expert Choice 11 software. Results showed that according to considered criteria in this research) differentiation strategy, ways to reduce costs, focusing on customers and market strategies, innovations and risk taking strategy) differentiation strategy plays the greatest role in gaining advantage for medicinal plants in Ilam Province.

**Keywords:**

competitive advantage, entrepreneurial strategy, Ilam Province, medicinal plants

<sup>1</sup> M.Sc. Graduation Entrepreneurship Education and Extension, Ilam University, Iran

<sup>2</sup> Assistant Professor, Department of Entrepreneurship and Rural Development, Ilam University, Iran

<sup>3</sup> Assistant Professor, Ilam University, Iran

\* Corresponding author's email: [homayoon.moradnezehadi@ilam.ac.ir](mailto:homayoon.moradnezehadi@ilam.ac.ir)

## INTRODUCTION

Nowadays, entrepreneurship plays a key role in economic development and it is considered as a source of jobs, innovation and competition in any market (Simpson *et al.*, 2011). More importantly, it has been proved that, according to marketing concepts, techniques, and principles it ensures small and medium-sized businesses' success (Carson, 2005). Now the environmental circumstances have changed in such a way that it leads small businesses to achieve entrepreneurial success strategies (Grath & MacMilan, 2000). Adopting entrepreneurial strategies in an enterprise leads to the release of strategic capabilities and its follow-up causes the firms to realize entrepreneurial opportunities frequently and systematically (Kuratko *et al.*, 2005).

Iran's economy dependence on oil revenues and earnings' being affected by political and economic issues has caused the economic vulnerability of the country. One way to deal with this challenge is to develop products that increase non-oil exports while improving the domestic economy. More than 80% of well-known medicinal plants in the world grow in products and it provides premature returns. Consequently, it can be concluded that investment on medicinal plants could have huge benefits for the country (Kashfi Bonab, 2010). At present, 80 percent of the populations in developing countries rely heavily on plant-based drugs for their health care needs, and the World Health Organization (WHO) has estimated that in coming decades, a similar percentage of the world population may well rely on plant-based medicines. Thirty percent of the drugs sold worldwide contain compounds derived from plant material (Hishe *et al.*, 2016). The present medicinal plants value chain is characterized by the informal nature of its upstream base (producers, gatherers and collectors) and its better organized and more formally structured actors downstream (processors and wholesalers/retailers). Overall, the value chain operates with little vertical integration and almost no horizontal collaboration. Yet actors are aware that there are local and export market opportunities for products without their necessarily being able to identify consumer

trends or to react quickly to them at their level of operation (Iqbal, 1993).

Medicinal value, market demand, and processing are the important indicators for economic assessment of medicinal plants. According to the Food and Agricultural Organization, the trade value of medicinal plants is currently about a hundred billion dollars and is expected to amount to five trillion dollars by 2050 (Kashfi Bonab, 2010). Iran with climatic conditions and plant diversity better than those of the Europe only has a share of 60 to 90 million US dollars of world trade in medicinal plants. Fortunately, with the developed countries of the world turning to herbal products and increasing consumption in the world, a golden opportunity has been given to Iran to increase its presence at international markets more than ever before.

According to the performed estimations in recent years, the value of world markets of medicinal plants (including medicinal plants and their products) has been increasing in recent years and in the meantime, Ilam Province has a high potential in terms of growth and trade in the agricultural sector, and this sector can be recognized as the leading economy in the province and as a profitable economy; accordingly, it is necessary to take a specific look at this sector. Medicinal plant industry as a part of the agricultural industry, given the province's potentials and advantages, could generate enormous revenues for the province; hence, cultivation and commercialization of these plants should be considered.

The present research has been conducted on the issue of identification and cultivation of medicinal plants and herbs and the effects of these medicines on specific types of diseases; however, other aspects such as marketing, processing, and packaging were ignored. When mention is made of competitive advantage or disadvantage, it is necessary to think about the origin of its creation and the theories presented in this context. The most important of the theories presented in competitive advantage and the emergence of these theories are the theory of industrial organization and the resource-based view. The first theory defines the source of

competitive advantage as its external environment and the other one introduces it as its internal environment. Resource-based view and the models within it believe that each company creates qualifications, competencies and capabilities for itself. These competencies through the impact on four famous element of competitive advantage (quality, performance, innovation and responsiveness to customers) create a competitive advantage for the company and thus affect its profitability (Mozhari and Rahmani, 2009). Barney (1986) argued that for companies to achieve better resources, they must have unique resources. He mentioned four features for such resources: valuable, rare, inimitable, and irreplaceable:

1- Valuable: A valuable resource enables the company to use environmental opportunities and neutralize environmental threats.

2- Rare: The rivals should not have such resources.

3- Inimitable: Copying what the company has should be difficult or impossible for competitors. For example, organizational culture or relationships the company has with other shareholders and companies

4- Irreplaceable: The competitors should not be able to find alternative sources for it.

Thus companies can achieve sustainable competitive advantage through a unique combination of skills and resources they have (Barney, 1986).

Entrepreneurship and creating strategy are two dynamic processes related to company performance. Strategy building indicates how the companies have planned the establishment and operation of competitive advantage in a particular environment while they define entrepreneurship as the promotion of searching to use the advantages of the product and innovation in the market (Stokes, 2000).

Entrepreneurial strategies can include the following five elements: strategic renewal, sustainable reconstruction, the scope of re-defining, organizational rejuvenation, and business model reconstruction (Covin and Miles, 1999). Along the same line, Kuratko *et al.* (2011) have considered entrepreneurial strategy as new business venturing, innovation, product/service innovation,

process innovation, self-renewal, risk-taking, activity and aggressive competition. On the one hand, there are different opinions about entrepreneurial strategies including Dhliwayo model (2014) that considers the entrepreneurial competitive advantage as including two parts of entrepreneurship and competitive strategy where the entrepreneurial strategy includes innovation, competitive advantage, activity, risk taking and strategic renewal. The competitive strategies likewise include cost leadership, defensive, opportunistic, analyst, and focus strategies (Dhliwayo, 2014). Hishe *et al.* (2016) concluded that medicinal plants can be collected from wild and cultivated areas. The supply chain is often very long with as many as six or seven marketing stages involving primary collectors and producers, local contractors, regional wholesale markets, large wholesale markets, and Medicinal plants that supply chains have varying requirements for their cultivation, resource management in the wild, harvesting, processing, and more importantly, marketing. In order to become competitive in the medicinal plants global market place, value chain must become more flexible, innovative, and efficient such that it can bring to market new products in a timely fashion.

Kongrer (2013) showed that strengths are the accessibility to raw materials, wide acceptance among overseas consumers, and the accreditation by international organizations. The opportunities of Thailand Traditional Medicine and herbal products composed of the increasing demand in both domestic and international market and the integration of Association of Southeast Asian Nations Economic Corporation. Weaknesses are explained as high cost of production, quality of raw materials, and strong dependency on overseas distributors. Threats in this industry related to the intense competition from both local and international markets. Hinterhuber and Liozu (2014) reported that innovation in pricing could be a firm's most powerful and, in several cases, least explored source of competitive advantage. Innovation in pricing brings new-to-the-industry methods to pricing strategies, to pricing tactics, and to the organization of pricing with the objective of increasing customer satisfaction and

firm profits;

Pearson et al. (2015) analyzed 49 airlines in Asia to identify intangible resources of competitive advantage. They analyzed three models in the business models of airlines such as network airlines; low-cost subsidiaries from network airlines; and low-cost carriers. It uses the VRIN framework which examines whether resources are valuable, rare, inimitable, and non-substitutable. Research participants distribute points between their chosen seven resources according to their perceived role in firm performance. Resources which meet all four requirements of VRIN are considered core competences and sources of sustained advantage. Across all 49 Asian airlines, the top-three most important resources of advantage are slots, brand, and product/service reputation. While these core resources are predictable, they have not previously been proven within the context of airlines, let alone geographically and by airline model. Results show that the core bundle of resources vary for each model, which helps to explain the difference in performance across models, and that some resources which were expected to be high-ranking, such as organizational culture and customer focus, were not. Loie (2015) analyzed competitive differentiation by brand in Indonesian chain stores and concluded that if the brand could create loyalty by ensuring customer satisfaction so that they repeat purchase, the highest competitive advantage is created. Molina et al. (2015) studied the effect of quality and environment management on the competitive advantage in 15 hotels and concluded that the quality and environment management improve competitive advantage. Furthermore, by planning to improve quality, hotels can greatly help remove the many obstacles in the way of environmental management.

Nilson et al. (2015) in their article titled *Sustainable Competitive Advantage Based on High Quality Input Resources* came to the conclusion that high quality resources can create a competitive advantage. It has been suggested that companies can group their forces based on related activities and then identify the groups with the best practice and study them so that they could

use them as the source of competitive advantage.

Herrera (2015) in a seminal paper titled *"Gaining Competitive Advantage by Social Innovation in Big Companies"* attempts to develop basic theory in the field of competitive advantage. This research was focused on social innovation that creates social values and competitive advantage. Herrera introduced three components of increasing corporate social innovation by strategic alignment, institutional elements, and clear targets. According to Herrera (2015), active institutional elements include stakeholders, operational structure, processes, and corporate culture. Herrera (2015) concludes that increased corporate social innovation is performed by introduced components and this social innovation is believed to lead to competitive advantage.

Argote and Ingram (2016) in a paper titled *"The Strategic Analysis of Differentiation in Emerging Businesses"* concluded that the use of differentiation strategy in emerging businesses can lead to competitive advantage. They introduced product quality and convenient services to customers as a source of product differentiation. The aim of this study was to analyze the entrepreneurial strategies of increasing competitive advantage of medicinal herbs in Ilam Province so that by identifying and using these strategies, the medicinal plants could gain competitive advantage and acquire the ability to compete in the market. To achieve this purpose, the following objectives were addressed:

1. Analyzing cost leadership strategy to enhance the competitive advantage of medicinal herbs in Ilam Province;
2. Analyzing the product differentiation strategy to enhance the competitive advantage of medicinal Herbs in Ilam Province;
3. Analyzing customer and market focus strategy to enhance the competitive advantage of medicinal herbs in Ilam Province;
4. Analyzing innovation strategy in the production and distribution to enhance the competitive advantage of medicinal herbs in Ilam Province;
5. Analyzing risk-taking strategy to enhance the competitive advantage of medicinal herbs in Ilam Province;

**MATERIALS AND METHODS**

This research is applied in terms of purpose and mixed (qualitative - quantitative) in terms of the paradigm. For the qualitative part, the Delphi method and for the quantitative part, the Analytic Hierarchy Process was used. The Delphi technique is a group facilitation technique that seeks to obtain consensus on the opinions of experts (respondents) through a series of structured questionnaires commonly referred to as rounds. The selection of the panel of experts involved a non-probability sampling technique, namely purposive sampling. Purposive sampling is based on the assumption that a researcher's knowledge about the population can be used to handpick the cases to be included in the sample (Polit et al., 2001). For the first part, five major strategies (cost leadership, product differentiation, customer and market focus, innovation, risk-taking) that were extracted from literature review were entered into Delphi panel; then the experts' opinions about the sub-criteria of the strategies of enhancing competitive advantage of medicinal herbs in Ilam Province were polled in the Delphi panel. In the quantitative phase, using Expert Choice 11 software and Analytic Hierarchy

Process (AHP), these strategies were prioritized. The population during the first part consisted of 12 individuals that were selected through purposive sampling and were identified as the members of the Delphi panel. The population in the second part comprised 33 individuals of the medicinal plant professionals and people who have done research in the field of medicinal plants that all of these people were studied by the census method. The main research tool was a questionnaire with two sections. The first section of the questionnaire was about personal and professional characteristics, and in the second section, entrepreneurial strategies of enhancing competitive advantage of medicinal herbs in Ilam Province were brought to the fore requiring the respondents to prioritize these strategies.

**RESULTS**

The main purpose was to analyze entrepreneurial strategies so as to enhance competitive advantage of Ilam medicinal plants. The results show that among the strategies to gain competitive advantage, the product differentiation strategy with the relative weight of 0.3 had the highest weight compared to other strategies that sug-

Table 1  
Prioritization of Criteria and Sub-Criteria of entrepreneurial strategies

Criterion (strategy)	The relative weight to objective criteria	The sub-criteria of the strategies	The relative weight of the sub-criteria to the criteria	Inconsistency coefficient
Cost leadership strategy	0.268	Research and development cost reduction	0.404	0.01
		Advertising cost reduction	0.34	
		Manufacturing overhead cost reduction	0.139	
Differentiation strategy	0.30	Labor costs reduction	0.117	0.01
		Paying attention to various tastes	0.337	
		The use of new technology	0.273	
		Providing proper services to customers	0.263	
Focus on customers and market strategy	0.106	Product quality	0.126	0.02
		Focus on competitors	0.55	
		Customer satisfaction	0.24	
Innovation strategy	0.16	The principle of market orientation	0.21	0.02
		Innovation in services	0.347	
Risk-taking strategy	0.268	Innovation in sales and distribution	0.246	0.05
		Product innovation	0.204	
		Innovation in marketing	0.204	
		Research risk	0.413	
		Raw material supply risk	0.327	
		Production risk	0.26	

geststhe importance of this strategy compared to other strategies. Then there are strategies of risk taking with the relative weight of 0.286, cost leadership strategy with the relative weight of 0.166, and innovation strategy with the relative weight of 0.16. The lowest relative weight is associated with the strategy of focusing on customers and the market with relative weight of 0.106 which indicates that this strategy is the least important one compared to the other strategies. The inconsistency coefficient is 0.03, which is acceptable (Table 1).

The first objective was analyzing the cost leadership strategy in the process of production and distribution of medicinal plants to enhance the competitive advantage of Ilam medicinal plants. Results of Table 1 show that from among the sub-criteria of cost leadership strategy, reduction of the cost of R&D has the relative weight of 0.404 that suggests that this sub-criterion has the highest degree of importance among the sub-criteria of cost leadership strategy. The sub-criteria of reducing the cost of advertising with the relative weight of 0.34 and reduction of overhead costs with the relative weight of 0.139 are in the next levels. In addition, it can be seen that the sub-criterion of reducing the labor costs with the relative weight of 0.117 has a lower degree of importance than other sub-criteria. This inconsistency coefficient has the prioritization of 0.01, which is acceptable.

The second objective was to analyze the product differentiation strategy of medicinal herbs as a means of enhancing the competitive advantage of Ilam medicinal plants. Results of Table 1 show that from among the sub-criteria of product differentiation strategy to gain differentiation strategy of medicinal herbs in Ilam Province, paying attention to various tastes with the relative weight of 0.333 has the highest degree of importance. Moreover, the sub-criteria of use of new technology with the relative weight of 0.276 and providing proper services to customers with the relative weight of 0.263 are the second and third priorities, whereas the sub-criterion of regarding the quality of manufactured products with the relative weight of 0.126 is the least important criterion. The inconsistency coefficient

of this prioritization is 0.01, which is acceptable.

The third objective was analyzing customer and market focus strategy to enhance the competitive advantage of Ilam medicinal plants. Results of Table 1 show that from among the sub-criteria of customer and market focus strategy, the focus on competitors' strategy with relative weight of 0.55333 has the highest degree of importance and then there is the strategy of customer satisfaction with products with the relative weight of 0.24. Furthermore, observing the principle of market orientation with the relative weight of 0.21 has a lower degree of importance compared to the other two strategies. The inconsistency coefficient of this prioritization is 0.02, which is acceptable.

The fourth objective was analyzing innovation strategy in the production and distribution of medicinal plants to enhance the competitive advantage of Ilam medicinal plants. Results of Table 1 show that among the sub-criteria of innovation strategy in the production and distribution of medicinal plants to enhance the competitive advantage of Ilam medicinal plants the sub-criteria of innovation in services with the relative weight of 0.347 has the highest importance and then there are the strategies of innovation in distribution and sales with the relative weight of 0.246, product innovation with the relative weight of 0.204 and finally marketing innovation with the relative weight of 0.204. The inconsistency coefficient of this prioritization is 2.02 which is acceptable.

The fifth objective was analysis of risk-taking strategy in the production and distribution of medicinal plants as a means of enhancing the competitive advantage of Ilam medicinal plants. A glimpse at the results of Table 1 show that from among the three sub-criteria of risk-taking strategy, research and development risk with the relative weight of 0.413 has the highest degree of importance followed by the risk of providing raw materials with the relative weight of 0.327. The lowest degree of importance is associated with production risk with the relative weight of 0.26. The inconsistency coefficient of this prioritization is 0.05, which is acceptable.

## CONCLUSION

The main results of this prioritization of strategies suggests that in addition to the importance of these five strategies to achieving competitive advantage in medicinal plants, differentiation strategy has the greatest share in gaining advantage for Ilam medicinal plants. Findings of Loie (2015), Argote and Ingram (2016), and Nilson *et al.* (2015) confirm this result, because they concluded that differentiation strategy can create competitive advantage. accordingly, based on this result, by differentiating the products of Ilam medicinal plants, given the climate conditions and the use of new technologies, it is possible to provide higher quality products to the market. In this regard, adding specific services to products such as giving free advice to customers can make them satisfied with their purchase. In addition,, given that most consumers of medicinal plants in the country are elderly people, it is possible to diverse the products based on different tastes and increase the number of customers.

according to identifying ways to reduce costs it can be concluded that, studies conducted by other companies which are active in the field of medicinal plants such as Barij Essence in Kashan can be a great source for access to result researches.; therefore, through this method, it is possible to save the cost of research and development to a large extent.

Among the differentiation sub-criteria in gaining competitive advantage in Ilam province, paying attention to different tastes of consumers has the highest degree of importance. The sub-criteria of using modern technology, offering convenient services to customers, and paying attention to product quality, however, are in the next places, respectively.

In order to analyze the strategy of focusing on customers and competitors to gain competitive advantage in Ilam province medicinal plants, the three criteria for customer satisfaction, focus on the competitors, and paying attention to the principle of market orientation were identified and prioritized. The results show that from among the three sub-criteria of focusing on customers and market strategies, the strategy of focusing on customers and competitors has the

highest degree of importance. Additionally, it was found that observing the market orientation principle had the lowest degree of importance in Ilam Province medicinal plant industry in comparison to the other two strategies.

In order to explore innovative strategies to gain competitive advantage of Ilam Province medicinal plants, the four sub-criteria of product innovation, service innovation, innovation in distribution and sales, and marketing innovation were identified and prioritized. The obtained results indicate that from among the strategies related to innovations in medicinal plant industry in Ilam Province, innovation in services has the highest degree of importance followed by innovation in distribution and sales, product innovation, and marketing innovation.

Finally, from among the three sub-criteria of risk-taking strategy, the research and development risk has the highest degree of importance followed by the risk of supply of raw materials. The lowest degree of importance is associated with the production risk.

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