ASSESSMENT OF HERBAL EXTRACT INDUSTRY IN WEST AZERBAIJAN PROVINCE

Seyyed Jafar Zonoozi[1] --- Soghra Rezai Nasab[2†]

[1]*Assistant professor of Management, Department of Economics & Management, University of Urmia, Iran*

[2]*Lecture of University, International Business Management, Iran*

ABSTRACT

The development of non-oil export and extension of industrial clusters have been always important policies in the economic development strategies of the country and are a part of resistance economy principles. So in the present research, major export barriers of herbal extracts are examined and ranked in West Azerbaijan in 2012. The population of the research includes 22 production units and experts of industrial clusters of herbal extracts in West Azerbaijan. Descriptive and inferential statistics are used to analyze data. In this research, 16 factors are identified as export barriers of herbal extracts in West Azerbaijan and are prioritized based on mean rank. Awareness of barriers to export herbal extracts helps the officials take effective actions to remove them. Finally, solutions are proposed to improve and promote the herbal extract industry in this province and to also solve problems in this industry.

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Keywords: Export, Non-oil export, Export barriers, Herbs, Herbal extract industry, International trade.

JEL Classification: F18, F63.

Contribution/ Originality

The paper's primary contribution is finding the way for expanding herbal extract export which is one of the important unknown capabilities of Azerbaijan province in Iran. This study is one of very few studies which have investigated the barriers for exporting of herbal extracts.

1. INTRODUCTION

Exporting is the most common mode of business involvement in the international marketplace because it involves minimum business risks, requires low commitment of resources, and offers high

flexibility. The benefits associated with exporting are not restricted to the individual firm itself. Economies also benefit from foreign operations of domestic firms because these activities promote socio-economic development, increase employment, generate spillover effects such as societal prosperity and assistance for local industries to boost productivity (Pinho and Martins, 2010). Thus, understanding barriers or obstacles to exporting activity should help in formulating public policy to stimulate firms to internationalize (Da Rocha *et al.*, 2008).

One of the most important economical sections in developing countries is agricultural section (Mehrabi Bashar and Somayye, 2009). In 2009 the export of agricultural section in Iran was about 18.9% of non-oil export of country (Quotation of customs of Iran). With supporting this section the quota of this section could be increased so agricultural section could Cited as a Commercial section.

West Azerbaijan province because of appropriate climate has wide Vegetation. This province is proper place for growth Species of herbs and by-products such as herbal extract, Essence, Dried herbs, etc. in form of traditionally, pilot and rarely Industrial. These products are exported limited to foreign countries though this province has high potential for producing and exporting of these products. There are some barriers and obstacles against the development of this industry in this province According to Zebardast (2009;2012).

In this paper the export barriers of herbal extracts in West Azerbaijan province are identified, ranked, and classified. So the present research identifies reasons of failure to export herbal extracts in West Azerbaijan and finally, it offers proper solutions to the experts, beneficiaries, and intellectuals in this industry.

2. LITERATURE REVIEW
2.1. Non-Oil Export

Export plays an important role in the economic development of countries. The causality direction examined between exports and growth in nine Middle East and North Africa countries (Abu-Quarn and Abu-Bader, 2004).The authors found some evidence that manufactured exports lead to growth when they represent a substantial volume of total exports. Generally, one of the most important problems of the developing countries is their monoculture and their economic dependence on the export of raw materials that have negatively affected the economic, social, and even cultural structures. Since a large part of the currency revenues of these countries is from exporting one or more raw materials, they have a very weak structure against foreign pressures and problems. Evidently in these conditions, any unusual fluctuation of the price of these products or limited products forming the main source of income of these countries will extensively affect the economic, political, social and even cultural structures (Mehnatfar and Hosein, 2004). Exports diversification in natural resource exporting countries is often considered the main objective to mitigate external shocks and sustain economic growth (Sachs and Warner, 1997; Gylfason, 2001). Export diversification may reduce the terms of trade deterioration associated with export commodity dependence. Experts of economy argue that relying on revenues from exporting crude oil for some decades has prevented the planners from diversifying the currency revenues and

developing the export (Prebisch, 1950; Singer, 1950). A large part of Iran's industry faces the exhaustion of machineries and technology and needs reconstruction and alternative technologies. In addition, the increasing domestic consumption is in a way that problems will occur for oil export in future (Mehnatfar and Hosein, 2004). Hence, non-oil export must be emphasized more.

2.2. Export of Herbs and Their By-Products

With its proper climate and plant diversity, Iran only accounts for 60 to 90 million dollars of the trade of herbs in the world (about 0.09% of whole international trade value). The main part of which is the trade of saffron. Besides saffron, the most important herbs exported in recent years are cumin, thyme, lemon balm, anise, etc., that are exported to different countries (Sefidkon, 2008). In addition, about 2 million dollars of forest and meadow by-products are exported to the global markets including Germany, France, and the United Arab Emirates (Ibid). The cluster of West Azerbaijan herbal extracts includes 4 industrial and semi-industrial manufacturing units, 8 plant units and 5000 house-based manufacturing units. Industrial and semi-industrial manufacturing units use developed equipment and technology in the process of production. The main products of the cluster include 70 types of herbal extracts and 70 types of dried herbs, extracts, and essence. Of course, essence production is not very developed and with standards necessary for export. The cluster's by-products include different candies, especially musk willow candies, different dairies (such as ice-cream) using herbal flavorings (Zebardast, 2012).

2.3. Export Barriers

Export barriers can be defined as "all those constraints that hinder the firm's ability to initiate, develop or sustain business operations in overseas markets" (Leonidou, 2004; Désiré Omgba, 2014). Research examined the differences in perception of export obstacles among managers of firms in different geographical locations (Suarez-Ortega, 2003). Export barriers and challenges are treated within the literature as attitudinal, structural, operational, and related constraints that hinder or prohibit the firm's ability to initiate, expand, or sustain export marketing operations (Morgan and Katsikeas, 1998).

Several scholars have offered classification schemes for export barriers. The barriers derived from both the internal and external environment of firms (Cavusgil, 1984; Cavusgil and Yeoh, 1994; Cavusgil and Zou, 1994; Tesfom and Lutz, 2006; Uner, 2013). Export barriers are classified based on those originating from the internal or external environment, and those in the home or foreign markets, resulting in four groups of barriers: internal/domestic, internal/ foreign, external/domestic and external/foreign (Leonidou, 1995; Morgan, 1997). Internal barriers were classified into functional, informational, and marketing, while external barriers were separated into procedural, governmental, task, and environmental (Leonidou, 2004). More recently, export barriers are grouped into four generic categories; knowledge, resource, procedure, and exogenous (Arteaga-Ortiz and Fernandez-Ortiz, 2010).

2.4. Background Researches

Huda Shaikh (2013) "export barriers of small and medium-sized enterprises" concluded that the main export barriers of shrimp to the European market are lack of investment in export and high cost of transportation. In addition, these companies also face other various barriers, such as lack of marketing research and suitable advertising in the industry.

EyjÓlfsson EyjÓlfur (2012) "export incentives and barriers to export the Icelandic fishing industry" concluded that the biggest export barriers of marine products are high cost of transportation from Iceland, trade policies, local transportation costs and instability of the business environment in Iceland.

Abassi *et al.* (2012) "Identifying the most important export barriers in Iran" found that the major export barriers are the status of representation, demand, the related and supporting industries, the company's structure and strategy, government, target market and chance.

Tare (2011) "import-export management of herbal drugs" concluded that barriers of export development of herbal drugs in India are as follows: inattention to industries, lack of information about social and economic advantages from using herbs industrially, lack of information about market potentials and trade of these products, and not using the actual potentials by governments and entrepreneurs in this sector effectively.

Andris (2010) "evolution of export barriers in transition economies" Spruds concluded that export barriers in transition economies are rapidly changing and the speed of changes depend on the level of a country's development; and the existing models have ignored the dynamic nature of the economic development environment. In the research, the researcher presented a new classification model for export barriers in economic development conditions; in this model, export barriers are classified into three classes in economic development conditions including constant barriers, decreasing barriers and increasing barriers; among which decreasing barriers are specific to economic development and their strength decreases over time.

Sajedi (2010) "barriers to the development of industrial and mineral exports in Markazi Province" found that export barriers are as follows: marketing problems, weak regulations, technology, and structural weakness.

Darisavi Bahmanshir *et al.* (2010) "The evaluation of non-oil export barriers in Khoozestan Province using factor analysis" found that export barriers are as follows: not knowing foreign consumer markets, not knowing modern business, weakness in product quality, problems of transportation, pricing issues and financial and exchange problems, weakness in packaging, government bureaucracy, problems related to encouraging exporters to trade by relevant agencies, problems related to customs and export ports, and change of export and import regulations.

Zebardast (2009) "analysis of pressure points and strategic problems of herbal extracts cluster in West Azerbaijan" concluded that the most important pressure points of the cluster of herbal extracts in West Azerbaijan are as follows: instability of supplying raw materials, lack of proper marketing mechanisms, and not enjoying products with the standard mark.

Fillis (2000)"……" He noted that principal difficulties in initiating exports related to increased competition in foreign markets, lack of knowledge of exporting, poor understanding of export payment procedures and problems with identifying target foreign markets.

3. OBJECTIVES

The main objective of this paper is identifying and ranking the export barriers of herbal extracts in West Azarbijan province and offering solutions for resolving them. Elimination of these barriers cause extension of the export of this product to foreign markets and are economical exploited from the potentials of province.

4. HYPOTHESES

Weakness in packaging, Transportation problems, Instability of export regulations, Lack of knowledge of foreign consumer markets, Nonintegrated export activities, Weakness in product quality, Pricing issues, Ineffectiveness of banking systems to support export, Government bureaucracy, Problems of encouraging exporters to trade by relevant agencies, Instability of raw materials supply are export barriers of herbal extracts from the province to foreign markets that are extracted from interviews, queries, relative texts, etc.

5. THE CONCEPTUAL MODEL

Fig-1. The conceptual model of the research

6. METHODOLOGY

The present research is an applied one in the field of export development of herbal extracts in West Azerbaijan. It is a descriptive- survey study in terms of purpose; its logic is inductive; its time of conduction is sectional and its process is quantitative.

The population of the research is the producers and experts of the cluster of herbal extracts in West Azerbaijan. The cluster of herbal extracts includes 22 production units and experts of herbal extract industry in this province that is taken as the population. Since the population was limited, census method was used.

In first stage, interview is done with a number of experts of herbal extracts industry so according to interviews, queries, related texts the hypotheses are extracted. In the next stage the questionnaire according to background researches is provided by the researcher. The questionnaire was given to some university professors to ensure its validity and their opinions were applied to modify it. Cronbach's alpha was used to measure the reliability. The questionnaire's Cronbach's alpha coefficient was 0.825; therefore, it has the required reliability. They were distributed among experts and managing directors of the production units of herbal extracts industry in West Azerbaijan. Demographic information of the subjects was questioned at the beginning of the questionnaire. The questionnaire included 33 closed questions.

Data were processed by SPSS Software. Single-sample test was used to analysis data and to test the hypotheses then Friedman test was used to rank the components.

7. FINDINGS

The results of the sample's general characteristics are shown in table 1.

Table-1. The results of the population's general characteristics

Age range	27-60 years old
Male/ Female (%)	82.1%
Managing director/expert (%)	60.7%
Working experience	5-35 years
Units with export (%)	35.3%

7.1. Test of Hypotheses

T-test was used to test the hypotheses. Before the mean test, normality test (Shapiro-Wilk) was first used for any hypothesis and it was found that the sample distribution was normal in all tests. The mean test was conducted for every hypothesis at the level of confidence 95%. the questions of the questionnaire are rated from 1 to 5 and the number 3 is considered as the boundary point, those components whose means are higher than 3 are considered as export barriers of herbal extracts in the province and those components whose means are less than 3 are not considered as export barriers of these products in the province.

Here the analyses are shown for first hypothesis:

Table-2. The mean scores of questions related to the weakness of the packaging

	Question	Count	The minimum score	The maximum score	Mean	Standard deviation
1	Weakness of technology	28	1	5	3.71	0.937
2	Lack of attention to the culture and consumption patterns in target markets	27	1	5	3.93	0.958
3	Lack of staff attention to packaging standards	26	1	5	3.35	1.056

$$H_0 : \left(\bar{X} \right) \leq 3$$

$$H_1 : \left(\bar{X} \right) \succ 3$$

$\bar{X}$ = *The mean score of weakness in the packaging*

H_0: weakness in the packaging is an export barrier

H_1: weakness in the packaging isn't an export barrier

According to the results, the mean score for the weakness of the package is 3.65 and it's higher than 3 so H_0 didn't accept. For testing hypothesis, normal test and then t-test are done.

Table-3. Normal test for weakness of packaging data

N		**26**
Normal Parameters	Mean	3.65
	Std. Deviation	0.81
Most Extreme Differences	Absolute	0.160
	Positive	0.126
	Negative	-0.160
Kolmogorov-Smirnov Z		0.816
Asymp. Sig. (2-tailed)		0.518

According to the results of the normal test, sig is higher than 0.05 so the data distribution is normal and the t-test could be used.

Table-4. Results of t-test

Variable	T- value	DF	Sig	Md	Lower	Top
Weakness of packaging	4.070	25	0.000	0.653	0.323	0.984

According to the results of the t-test, sig is lower than 0.05 so H_0 isn't accepted and H_1 is accepted in 95% confidence level so the weakness of the packaging is an export barrier in West Azerbaijan.

These analyzes are done for other hypothesizes.

Table-5 . Results of mean score and t-test for other variables

Variable	mean	sig
Transportation problems	3.12	0.367
Instability of export regulations	4.29	0.000
Lack of knowledge of foreign consumer markets	4.20	0.000
Nonintegrated export activities	3.65	0.000
Weakness in product quality	3.79	0.000
Pricing issues	3.82	0.000
Ineffectiveness of banking systems to support export	4.47	0.000
Government bureaucracy	4.09	0.000
Problems of encouraging exporters to trade by relevant agencies	4.08	0.000
Instability of raw materials supply	3.55	0.002

The results of process show that 10 elements of 11 components are accepted as exporting barriers, including: Weakness in packaging, Instability of export regulations, Lack of knowledge of foreign consumer markets, Nonintegrated export activities, Weakness in product quality, Pricing issues, Ineffectiveness of banking systems to support export, Government bureaucracy, Problems related to encouraging exporters to trade by relevant agencies and Instability of raw materials supply. According to the results, the problems of transportation aren't export barrier.

7.2. Ranking the Barriers

In this research, export barriers are ranked using Friedman test and barriers are prioritized based on the mean rank. The results of this test are shown in table 2.

Table-6. Ranking barriers based on the mean rank

Barriers	Mean rank
Ineffectiveness of banking systems to support export	8.35
Lack of knowledge of foreign consumer markets	7.74
Instability of export regulations	7.35
Government bureaucracy	7.13
Problems related to encouraging exporters to trade by relevant agencies	6.46
Weakness in product quality	5.98
Pricing issues	5.46
Nonintegrated export activities	4.93
Weakness in packaging	4.61
Instability of raw materials supply	4.61

7.3. Classifying the Herbal Extract Barriers

According to the identified barriers, the herbal extract barriers could be classified in 3 classes on the base of relative compass. Management barriers related to management, Coordination and Decision making problems in the industry level. Resolving these barriers should be done in the

industrial cluster[1] level. Governmental barriers including some barriers related to governmental sector and resolving them should be done by government. Marketing barriers including some barriers related to marketing problems in the industry level and necessary steps should be done in the industrial cluster.
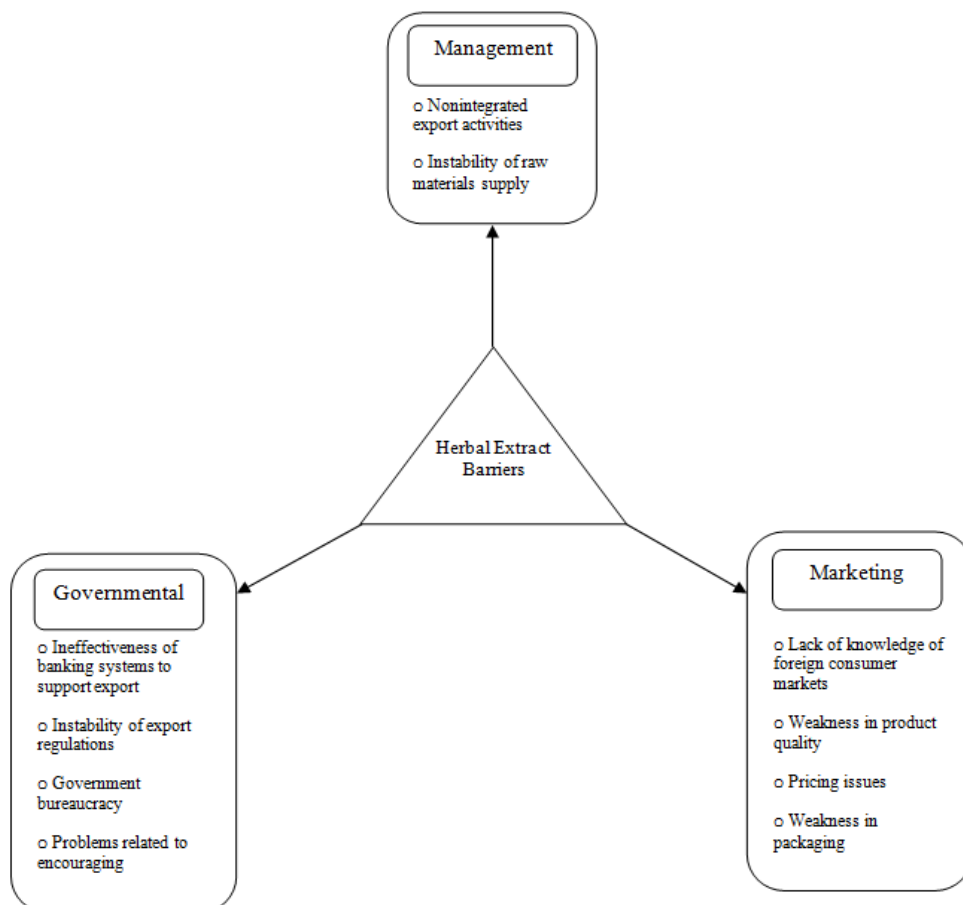

Fig-2. Classification of herbal extract barriers in West Azerbaijan province

8. CONCLUSION AND DISCUSSION

The results of mean test show that all elements have higher mean than 3. The results of normal test show that the population has normal distribution. The results of T-test show that except "problems of transportation" all of elements as export barriers are accepted and then they are ranked by Friedman test as follow: ineffectiveness of banking systems to support export, Lack of knowledge of foreign consumer markets, instability of export regulations, government bureaucracy, problems related to encouraging exporters to trade by relevant agencies, weakness in product quality, pricing issues, nonintegrated export activities, weakness in packaging, instability of raw materials supply. Finally, according to the identified barriers, they classified in 3 classes of management, governmental and marketing. These results support the findings of researchers such

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[1] Clusters are groups of inter-related industries that drive wealth creation in a region, primarily through export of goods and services.

as Huda Shaikh (2013); EyjÓlfsson EyjÓlfur (2012); Abassi *et al.* (2012); Tare (2011); Sajedi (2010); Darisavi Bahmanshir *et al.* (2010).

9. SUGGESTIONS

According to the results, there are many barriers to export herbal extracts that must be removed by the cooperation of public and private sectors and export must be facilitated.

The classification of barriers is useful in providing suggestions for overcoming them. The activities related to every section could be divided. In his way Authorities of every section could plan for improving their goals. Of course Investigation to overcoming barriers should be according to the ranking of them.

In management section, using opinions of successful producers and exporters in professional export committees, holding training courses and advisory meetings for producers that are members of the cluster, providing conditions to participate in international exhibitions to be more familiar with the products of different countries, holding different meetings for members of the cluster to know and cooperate with each other widely, integrating underlying activities (support service) required for foreign trade of the members of the cluster, encouraging researchers and academics to do field studies in the cluster using experts about support services required by producers such as marketing, technical service, business consulting, financial management etc., establishing an independent Business Development Service (BDS) office.

In governmental section, providing proper mechanisms to supply cheap and long term financial resources (working capital) through banking network for the export sector, providing conditions of the development of electronic banking for export, reducing government's interference in industry and export sectors, incentive and supportive plans must be consistent with the companies' needs, adopting policies to stabilize the price of raw materials,.

In marketing section, determining and defining marketing strategies to enter global markets for export development, studying experiences of foreign companies entered the target market before, employing some experts for sending them to target markets for identifying the markets, Required the quality control unit in all factories and Workshops for refusing the quality of products and rising the standards, some marketing activities should be done in the range of province industry such as designing a logo, arranging the prices, design a package model etc.

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