Comparative advantage of grape production in Fars province

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Abstract: The purpose of this study to determine comparative advantage and the product is grape in Fars province. In this study required data through the Agricultural Jahad Organization in 2010 were collected using DRC indices were analyzed. The results of this study showed that grape production in Fars province is a comparative advantage. Therefore, the result for practical suggestions to increase production of this product is available at the end of the article.

Introduction:

Export development and increasing its diversity depends on the production potential and competitive ability of agricultural products produced in the province of the world market and competitive ability of agricultural products affected by factors such as price and quality of their content. One of the indicators which measure a country's competitive ability of products used in the global market index is a comparative advantage. Based on this index if the country or regional production factors and inputs and can be much less expensive than the goods produced in other regions to supply the world market, the production of goods that have comparative advantage against other competitors can market is maintain its export. The concept of comparative advantage to the competition between domestic production and production will focus on competing countries. Another concept of comparative advantage, there are also compared to production in different regions of a country that paid position than other regions of the measures. This concept was more physical and its role in determining the prices are not (Mohammadi, 2004).

In today's world the importance of exports of goods and services beyond the measures for countries that already has been done in Iran. The products for export should be of quality, price and compliance with consumer preferences, the ability to compete with similar types in international markets possess. However, the production of appropriate and consistent with the standards required for export as the export trade and non-oil export products of our country does not have a real place and this causes loss of target markets are. Most countries a wide activity to identify success factors and organize their trade policies to promote exports has. In our country, policies to support farm income and has taken part country a review of the status quo and expression can

challenge any planning policy and the best strategy is fundamental role (Hassan translucent, 2005).

The country, including the trees, vineyards scattered around 306 hectares of grapes that 35/91 percent of

the grapes are trees. Fars province with a 68/20 percent share of the country's fertile vineyards of the surface is in prime position. Khorasan, Qazvin, East Azerbaijan, West Azerbaijan, Zanjan and Hamedan, respectively 32/16, 99/11, 83 / 7, 45 / 7, 64 / 6 and 22 / 5 percent share of grapes in the fertile country in the next Votes have been. 14/76 percent level of total fertility in the country grapes are seven provinces and other provinces, 86/23 percent level fertile country have grapes. Grape production around the country 87 / 2 million tons of 39/89 percent of the irrigated has been made. Despite the allocation of Fars province ranks first fertile level of production with 96/12 percent share of production in the second position of manufacturers rather than grapes have been (Statistic Agriculture, Volume I and garden crops, 2003).

Fars province is one of the poles is agricultural country with good investment and can be programmed as one of the main centers of production and export of agricultural products, to act (Najafi, 2003). Grape cultivation in 2005 years in Fars province was 67,205 hectares including 18,600 hectares of fertile and 48,605 hectares of fertile non-fertilized and fertilized Diem was. In the years 2006, 2007, 2008 and 2009, respectively cultivation hectares has been 69210,69618,67904,72785 than 2005 years has increased. Production rate in 2005 years, and 412,686 tons in 2009 years production has increased and the rate of 422,625 ton is reached. (Bank of Agriculture Horticultural Fars province).

Many articles about the calculation of comparative advantage in exports of various commodities in different regions have been the following:

Fathi (2002), using index of comparative advantage was revealed comparative advantage to analyze export groups of Iranian food industry in the years 1994-98 and concluded that paying on Iran's naval products not only their share in maintaining world market but not part of it is lost. Also in the period studied, Iran losing its export market in sugar and sugar were untreated, but has failed in global market share of bread and biscuits and sweets as well as its comparative advantage and export performance in the areas and types of pasta Spaghetti increase. About the kinds of fruit, canned fruit and jam, exports improved livestock and poultry Export business has been very little success.

Gholi Beglu (2005), supportive government policies impact on the relative advantages for crops and horticulture in Qazvin has studied. Criteria for calculating results SCB, DRC suggests lack comparative advantage in producing almonds in the province, the common price for the real exchange rate, leading to worsening conditions for peanuts is. In this study, to determine the exchange rate from purchasing power parity value using the price index and consumer goods in America as a country with high integration in trade relations with Iran, the relationship has been used.

Mehdipour (2006), showed that potato production in Iran has a comparative advantage. On the other hand there excise coefficients support the product and the indirect subsidies to business inputs can be confirmed.

Eshraghi and Yazdani (2005), comparative advantage in producing peanut Chaharmahal Bakhtiari, using criteria SCB, DRC, NSP has met on three Yadh index, the almond production in the region has comparative advantage have been considered. Their average rate of buying and selling currencies in non-oil goods estimated shadow prices of inputs have to be used in trading.

Aong (2008), examines the kinds of comparative advantage in export markets has dealt with China. China and Myanmar relations trends showed the economic and technical cooperation between the two countries is growing. Myanmar's exports to China include natural resources such as wood, pearl, raw silk, mineral stones, vegetables and ... Only in the forest products are exported with comparative advantage.

Aksynhva (2008), the analysis of comparative advantage in Asia shrimp production and export of payment. In this study, data from the years 2003-1990 and RCA & NTB & MOR indicators were used. Research results show. Developed countries including America, Japan and Europe's largest shrimp importers and developing countries, especially Asian countries of the world's largest shrimp suppliers are.

Leonardo and others (1993), using the benchmark cost of domestic resources, nominal and effective rates of protection and social profitability of comparative advantage of five major agricultural products in Indonesia, including rice, corn, soy, sugar and flour Kasava began. The results showed that rice and corn production compared to import their comparative advantage, but the comparative advantage of rice is more corn. DRC showed that the efficiency of soybean production is huge and expanding its production can be efficient rather than other products such as maize and rice to take. This is mainly due to government support such as support prices and restrictions applied to imports are soybean. Calculation showed that Sugar production compared with imports of sugar, not economic efficiency.

Research Methodology:

1. Index of domestic resources cost (DRC):
Measured by this method, especially, Michael Bruno and developing found. Superior method of internal resources cost than other methods is that the price changes resulting from fluctuations in exchange rates primarily on research related to the development of export is imported or saving it and cause it seems more accurate calculation in terms of making explicit exchange rate and the size of several factors measured changes in exchange rates is particularly (Bruno 1963).

DRC calculation formula for a pure product is as follows.

(2) $DRC = CD / (e.PW - e.CE)$

CD = cost of domestic inputs with a shadow price
CE = shadow cost of external inputs to produce a dollar unit (currency)
Pw = product price borders dollars (FOB export price or import price CIF)

This case shows the fraction of all shadows of all costs that domestic inputs to produce a product or products are used and the denominator of this fraction showed net revenue is a shadow price. If DRC <1 is the concept that net income to producers a shadow price (net of exchange received) more than a shadow cost domestic inputs are other words in this case the form of resources used is efficient utilization and consequently produced goods in the global competition, have comparative advantage is if DRC> 1 is that the concept of economic goods than it imports it into production because the exchange saving mode and have no other words reflect the lack of international comparative advantage goods on stage is. DRC = 1 if the concept is that within the production or import of the privilege than me and no

country should be given to materials and experts to produce or export to the action.

2. Nominal protection coefficient of the product (NPCO):

The relationship between the amount of price difference between market prices and shadow shows. Mathematical relationship used to calculate NPCO within PAM matrix is as follows:

$$NPCO = A / E$$

If NPCO> 1 is the domestic price (market) over the price of imports or exports and production system has the support and indirect subsidies to producers are paid and if NPCO <1 market price is lower than international prices and the indirect tax imposed on producers and NPCO = 1 if the production system is supportive of the policy will not enjoy.

3. The nominal protection coefficient inputs (NPI):

This cost factor inputs can be compared in terms of trade established by the market price to be cost per trade will calculate a shadow price.

$$NPI = B / F$$

If NPI> 1 is an indirect tax on the inputs and if there are significant trade NPI <1 is the concept of an indirect subsidy on inputs available and if business is NPI = 1 means no protectionist policies imposed on inputs does not.

4. Effective protection coefficient (EPC):

The benchmark price of the product value based on market prices to value added production of the shadow price measures through this can factor the effects of government intervention in product markets simultaneously examined.

$$EPC = A-B/E-F$$

If EPC> 1 is the government policy of production process and if the product supports EPC <1 means is government intervention to act has hurt production and EPC = 1 no policy about the product cannot be imposed by the government.

5. Net social profitability (NSP)

The index of the fraction of the cost of a shade of shadow income is achieved.

$$NSP = (E-F-G)$$

If NSP> 1 is the production and export of the product is profitable and if NSP <1 is not profitable means of production and exports.

6. Determine how a shadow price

PAM determine the most important parts of the shadow prices for inputs of production and opportunity cost for the basic factors that production through the adjustment and correction in nominal prices (market) is done.

Production inputs to be two categories of non-exchange trading, and is divided. Non-interchangeable input refers to those who produced them and not ability to export through imports is not possible because the same feature set domestic prices of them as a shadow price considered. If these inputs are several domestic prices, the highest price as a shadow price is considered. Many of the inputs used for construction of the garden, such as wire, concrete base, animal manure and sand, wind, etc. are such.

Set the table in early PAM opportunity cost inputs such as land and labor must also be calculated. According to research conducted usually land rent costs as a shadow price of these inputs are considered.

But an established exchange, refers to those that are produced within the country and if not have the internal ability to export. To calculate a shadow price of the world price of inputs they used. The shadow price of inputs using prices (CIF) imports, real exchange rate and cost of transportation to field borders can be calculated through all non-precious and precious disorders is neutralized.

So the real exchange rate in calculating shadow prices of imported inputs and a shadow price of the product is used to calculate the PAM components. Despite the lack of units in the field of view calculated real exchange rate, purchasing power parity theory (PPP) agreed to some economists is more.

Shipping costs another product variables that determine the price of imported products and inputs used.

Conclusion:

Comparative advantage to determine the methods Grape (DRC, NSP, SCB) production costs and income should be calculated for each product. Cost and revenue to the market price of the cost of agricultural production by the Ministry of Agriculture is published.

Table 1. The average amount spent on the institutions of a hectare (kg - Rial)

Ptas·h		Other fertilizers		nitrogen		Phosphate	
Value	Kg	Value	Kg	Value	Kg	Value	Kg
100	150	15000	5	100	200	100	150

Water pricing and water harvesting		Pesticides disease		toxin excretion	
Value	Kg	Value	Kg	Value	Kg
100	8000	8000	6	12000	6

• Agriculture Organization of Fars Province in 1389

In this section, according to the values obtained for the indices was observed that the product listed has a comparative advantage, which is produced according to comparative advantage index of comparative advantage can produce the products above concluded:

Table 2. Determine internal resource cost index (DRC) for the product Grapes

Real exchange rate (U.S. $ RLS)	1189
Price (CIF / FOB) product of $	854
Horton In terms of tons per hectare yield	16.5
The total transaction cost of inputs per hectare	1329683.5
The total cost of domestic inputs per hectare	11850000
Total cost	13179684
A shadow over the farm product price (Rial / ton)	820406
The total product revenue ha shadow	13536699
Index of domestic resources cost (DRC)	0.97

* Research findings

Grape products according to production costs and price performance with equivalent DRC 97 / 0 with a cost roughly equivalent resources that can be enjoyed almost on the spot said the costs and benefits over the series is. This means that it produces or imports into it from outside is not much difference and should policymakers considering policies and business interests is through the province.

Since comparative advantage is dynamic products and change the variable value will change it, so proper planning can be used to create products of comparative advantage.

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