Estimating the Value of Improvement in Lake Urmia's Environmental Situation Using Choice Experiment

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Abstract

The lake Urmia and satellite wetlands have been selected as a demonstration site for the UNDP/GEF/DOE conservation of Iranian Wetlands Project. This project aims to demonstrate reduction of the major threats of this wetland protected area coordinated through an integrated management plan. We develop a choice experiment to examine public preferences and elicit their willingness to pay on improvements in lake's indicators toward good environmental status. A pilot choice experiment study is administered in Urmia municipality and the data are analyzed using mixed logit model. The results reveal that residents of this municipality may strongly prefer improvement in water quantity and are willing to pay significant amounts (26000 RLs per household per year) to promote current water level to the high level. Further, water quality, numbers of flamingos and Artemia stock (23000, 14670 and 11330 RLs per household per year respectively) are identified as next important issues that warrant additional management attention.

Keywords: Choice Experiment, Lake Urmia, Mixed Logit Model, Willingness to Pay

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Determining the Status of Organizational Agility Capabilities in Transforming and Complementary Agricultural Industries with the Fuzzy Approach

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Abstract

Manufacturing industries of agricultural products, which constitute a considerable part of different countries' economies, are seeking new profitable opportunities by increasing competition at the international level. Organizational agility is new method and philosophy of production that seeks to react effectively to the variable and unpredictable environment and to utilize the changes as chances for organizational progress and profitability. In this regard, the present research aims to survey the capabilities of organizational agility in complementary and convertor agricultural industries. For this purpose, based on organizational agility literature, four variables- responsiveness, competency, flexibility, and quickness- were examined as the agility capabilities. The research method was descriptive, and the statistical population included 142 managers of Agricultural industries in East Azarbaijan Province during the year 2012. The study sample was calculated 117 using simple random sampling technique. For data collection, the questionnaire was designed by some scholars. The data was analyzed by means of descriptive statistics, inferential statistics and fuzzy set theory. The results showed that the complementary and the convertor agricultural industries of the province have obtained scores higher than the average for the capabilities of responsiveness, flexibility, and quickness but a lower one for the capability of the competency. With regard to the fact that compiling the strategic vision, technological ability, and introducing the new products are among the main components of achieving competency, it is suggested that managers of this sector should, in order to reinforce competency in agricultural industries, pay special attention to compiling the strategic vision, making use of information technology, and using the new opportunities of the market to introduce the new products.

Keywords: Organizational agility, Responsiveness, Competency, Flexibility, Quickness

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Exploring Systematic Yield Risk and Its Strengthening Factors for Apple Production in Iran: Application of Spatial Autoregressive Models

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Abstract

The presence of yield systematic risk in agricultural sector is one of the main reasons for facing this sector with huge damages and is one of the restricting factors in developing agricultural insurance in Iran. This study explores the presence of systematic yield risk and the extent and severity of yield spatial dependence for apple production in Iran. To this end, the apple production regions were grouped into two climatic regions based on their thermal regimes. In the second step, systematic yield risk was explored using the first order spatial autoregressive (FAR) model in each of the two climatic regions. Finally, the effects of climatic variables on the yield of apple have been estimated using more general spatial autoregressive models. Results indicate that apple production regions can be classified into two mountainous and plain regions. Apple yields are correlated across space in each of the two regions. Frost in the first region and drought in the second region is accounted for the presence of systematic yield risk in apple production in Iran. Results from more general models revealed that one year lag of drought, the occurrence of frost in March, average of temperature in June and July, total annual precipitation, and variation of precipitation are important climate variables that affect apple yield in Iran.

Keywords: Systematic risk, Spatial Autoregressive Models, Apple, Climatic variables, Iran

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The Relationship between Farm-Gate and Consumer Demand for Meat Demand in Iran

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Abstract

Demand for farm output is theoretically consistent with consumer demand and marketing performance. Many studies have focused on demand interrelationships at the retail level, but not on the demand for farm output. In this study, derived demand elasticities of sheep, beef and chicken were estimated in a complete system of demand functions by seemingly unrelated regression estimator (SURE) for the years 1984-2012. Sheep, beef and chicken are considered as inputs for food processing and marketing and so their corresponding derived demands are related to consumer demand and marketing performance. Based on findings of this study, the elasticities of substitution are estimated to be 0.26 for sheep, 0.38 for cattle and 0.32 for poultry. The results showed that derived demand elasticity is more sensitive than the one measured by the traditional method. The price elasticities of the derived demands for the three types of meat were calculated-0.922, -0.775 and -0.716 for sheep, beef and chicken, respectively. This presents that demands at the farm level are less elastic than the associated demands at the retail level. Therefore, policies that change meat price at farm or retail level affect marginal markets of other meat products. According to the results of this study, it is necessary for policy makers to have information on the derived demand elasticity.

Keywords: Elasticity of substitution, Derived demand, Farm-gate demand, Consumer demand, Meats

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Investigation the Relation between Growth of Agriculture Sector with Growth of Industry and Services Sectors (Commerce, Transportation, Telecommunication) in Iran

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Abstract

Agriculture has always been considerd as one of the important sectors in domestic and international economy .Based on the Central Bank Statistics; agriculture's share in the Iranian GDP at the constant price of the year 1998 was 13 percent of the GDP in the year 2007. Therefore, studies on the role of agriculture in an economy and its interactions with other economic sectors should be considered with a special attention. This paper aimed at surveying the effects of growth of value-added in agriculture on the value-added of different sectors of industry,services as well as subordinate sectors of transportation, communication and commerce. In this regard, the status of the period between 1967 to 2009 is used. To determine the relationship among the study variables, some econometric techniques such as VAR were used. The results of VAR technique proves that there is a positive relation among the growth of value-added in the agricultural sector with the growth of industrial sector and the growth of sub-sectors of communication, transportation and commerce. Among the mentioned sectors and sub-sectors, the growth of commerce has maximum effect on the agricultural growth. Furthermore, in the short term, the growth variant of trading sector presented the largest share in explaining the variants of the agriculture sector . The growth variant of communication sector is trivial

Keywords: Autoregressive Model, Growth of Agriculture Value-added, Impulse Response Function, Variance Decomposition

JEL: C_{32}. O_{11}, Q_{10}

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The Effect of Monetary Policy on Food Price Index: A Factor Augmented Vector Autoregressive (FAVAR) Approach

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Abstract

Achieving an acceptable level of price growth is one of the main objectives of economic policies. With consideration to the importance of food, information on food price response to monetary policies is important. To achieve the object, scholars recently emphasize the use of models in which a wide range of economic data are included. These models are created by inclusion of one or more factors within the traditional VAR models. In this study, we tried to evaluate the effect of monetary policy on food price by using small scale of FAVAR model. For the purpose, 31 macroeconomic variables in periods 1367:1 to 1387:4 were included. The results showed that the liquidity shock has not influenced food price index for approximately ten next seasons. After this period, the liquidity shock makes increasing fluctuations on food price in such a way that the equilibrium has not been reachable. Therefore, a monetary shock will lead to instability fluctuations in the food price index for the long run. The fluctuations are cyclic and will increase over time in the way that they present reductions and increases around an equilibrium point .

Keywords: Monetary policy, Food Price Index, Factor Augmented Vector Autoregressive, Principal Components

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Strategies of Market Development of Healthy Food Products in Hamadan

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Abstract

This study was conducted at the aim of determining development strategies for marketing healthy food products. The study data was collected by conducting field survey and compeleting a questionnaire. Using simple random sampling, about 400 Hamedan citizens were selected in 2013. The data analysis was conducted by ordinal Logit model with method of maximum Likelihood. According to the results, 32 percent of people do not tend to shopping healthy food products, 34.3 percent of people ignored shopping of healthy food products, 33.8 percent of them tend to shopping of healthy food products. The results of estimating the ordinal Logit model presented that strategies such as cognition indicators, environment lover, Advertising and Information, Education, Supportive and monitoring facilities, structural and Service facilities and economic indicator should be considered as marketing strategies to develop healthy food products. In order to develop the healthy food market, the long term programs in the three sectors of products, consumption and marketing should be considered from specific purposes.

Keywords: Strategy, Market Development, Healthy Food Products, Ordinal Logit Model, Hamadan

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Analysis of the Economic and Welfare Impacts of Establishment Irrigation Water Market in Qazvin Province

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Abstract

In this study economic and welfare impacts of establishing irrigation water market in Qazvin province as well as potentiality of irrigation water transfer under stress irrigation conditions in the cities of Qazvin province were analyzed. To achieve the above objectives, Positive Mathematical Programming model and State Wide Agricultural Production functions were used. To achieve applicable results, the production function with a constant elasticity of substitution and cost function with an exponential form were included into the Positive Mathematical Programming model was imported. The study data for the year 2011-2012 was collected by asking the relevant offices in each city of Qazvin province. The proposed model was solved in six successive stages using the GAMS software. After solving the model, amount changes in the area of irrigated crops, farmer's gross profit and labor surplus under the two conditions of "existence of water market" and "lack of water market "at the regional level were calculated. The results showed that establishing irrigation water market increases total irrigated lands for 1/2 percent, total farmer's gross profit for 1/86 percent and total labor force employed in agriculture for 1/8 percent in the province. Ultimately, considering the supportive and constructive role of regional water markets, it is recommended to provide necessary conditions and tools to establish an optimal use of such a mechanism associated with the type of market in Qazvin province.

Keywords: Water Market, Positive Mathematical Programming, Spatial Aggregation, SWAP Model, Qazvin

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The Impact of Trade Openness on Employment and Real Wage in Iranian Food and Beverage Industries (A Dynamic Panel Data Approach)

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Abstract

Abstract

The main purpose of this paper is to investigate the impact of trade openness on the Employment and the real Wage for the Iranian Food and Beverage Industries over the year 2007. For this purpose in this study, the ratio of export to Production Value has been considered as a proxy for trade openness and the main model has been estimated using a Dynamic Panel Data (DPD) approach. The main findings of this study indicate that the trade openness has positive and significant effect on the employment and the real wage in the Iranian Food and Beverage Industries. Moreover, output value and real wage have positive and significant effect on the employment. Hence, the main recommendation of this paper to policy makers is to expand the food and beverage exports for improvement of employment and real wage in the Iranian Food and Beverage Industries.

Keywords: Trade Openness, Employment, Real Wage, Dynamic Panel Data Approach, Iranian Food and Beverage Industries

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