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ABSTRACTS

**Study of Efficiency and Optimal Inputs Usage for
Rice production; Case Study: Rice Producers in
Kamfirouz District, Fars Province**

M. Esfandiari, J. Shahraki and A.R. Karbasi*

Received: 4 Nov. 2011

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Abstract

Efficiency survey of agricultural products is an important and effective factor for increasing production and yield without extra costs. In this paper, Data Envelopment Analysis method is applied to measure technical, economic, allocative, management and scale efficiencies and optimal amounts of inputs, emphasizing on water, are estimated for rice producers in Kamfirouz district, Fars Province. The data for these analyses are collected from 211 questionnaires in 2010-2011. Results indicated that on average, technical, allocative, economic, management and scale efficiencies are 72, 40, 29, 79 and 91 percents respectively. Maximum of undesirable use of inputs is related to irrigation water with inefficiency of 40 percent. Optimal expenditure of irrigation water is 11420 m³/hectare.

JEL classification: E23, H21, N5

Keywords: Data Envelopment Analysis (DEA), Efficiency, Water Expenditure, Kamfirouz, Rice

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Investigating dimensions of educational poverty in Iranian rural communities focusing on literacy information and its overcoming priorities

A. Shirvanian and M. Bakhshoodeh*

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Abstract

Poverty is a multidimensional phenomenon and educational poverty is one of its aspects. This study aimed to understand the nature of educational poverty in Iranian rural communities and explain adequate strategies to combat it. For this purpose, the literacy information, head count ratio and poverty gap ratio indexes and techniques for order performance by similarity to ideal solution were applied to Iranian rural households' data in 2010 reported by Statistical Center of Iran. Results indicated that educational poverty governs to all rural households in a way that rural households on average do not have access to two-fifth of educational equipments and facilities. Based on the findings, the best strategy for obtaining educational poverty is development of internet system and increasing the number of its users. In formal education levels, concentration on universities education, and in acceptance and applying information aspect, concentration on publications, especially books and books reading is in priority.

JEL Classification: I3, D1, R0

Keywords: Educational poverty, Information literacy, Rural households, Poverty indicators, Iran

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**Price liberalization and household consumption
pattern changes in Iran: Integration of input - output
tables and household demand system**

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Abstract

The prices of energy and major foods have sharply increased after implementing targeting subsidies scheme on these commodities since mid-2010 in Iran. In this study, the rate of changes in prices of energy carriers and food items were determined based on two options for the scheme direction, namely the option of bringing domestic prices to the border prices (for energy carriers) and eliminating direct subsidies, and the option of calculating real domestic prices in 2008 by elimination of subsidies (direct and indirect) paid. Then, effects of price liberalization on the consumption pattern were analyzed through integrating household demand systems in a Leontief input-output price model. Based on the findings, the highest changes of base and purchasing prices are related to the different types of flour and other grain mill products. The highest and lowest increases in the price index have been achieved in the price index of food, beverages and tobacco group, and clothing and footwear group respectively. While the expenditure shares of food, beverages and tobacco, housing, water, electricity, gas and other fuels, transport and communication and furnishings, household equipment and routine household maintenance groups increased, those of other groups have gone down. Since more than 70 percent of households' expenditures are devoted to food, beverages and tobacco, housing, water, electricity, gas and other fuels, transport and communication groups, increasing the shares of these groups and decreasing the shares of other groups can cause more reduction on allocated budget to recreational, cultural and health items, and this could be an undesirable change in consumption pattern. But since the effect of budget on consumer behavior is higher than price effects, it can be concluded that this negative effect will be compensated if changes in consumption pattern be accompanied with increasing household budget. To realize such condition, it is recommended that the revenues earned by Iranian government, after cutting energy and food subsidies to be invested in infrastructure and development projects and to empower private sector, till the optimal allocation of resources is being provided, and to increase households' income and reduce negative effects of price liberalization on the other hand.

JEL Classification: C67, C51, D12

Keywords: Price liberalization, consumption patterns, input – output, household demand system

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Study of real effective exchange rate on agricultural gross domestic product and export

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Abstract

The current study attempted to investigate the effects of real effective exchange rate on the gross national product and export in the agricultural sector. The time series data for the period of 1976-2008 were used. Data collected from Iran's Central Bank annual reports, the Offices of Commerce annual statistics and International Monetary Fund (IMF). Real effective exchange rates were determined for the period of study and their effects were examined on the agricultural gross domestic product and its export. Results showed that real effective exchange rate, volume of currency in circulation, the government expenses and agricultural exports had positive effect on gross domestic product. In addition, it was found that increase in agricultural gross product, real effective exchange rate, the volume of money in circulation and government expenses would increase agricultural exports.

JEL Classification: C22, E01, F10

Keywords: Real effective exchange rate, Agricultural gross national products, agricultural exports, Iran

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**Factors affecting market development of saffron
using Fuzzy Delphi**

**K. Farahmand, M. Daneshvar Kakhaki, N. Shahnooshi, V.
Ghasemi and A. Hemmati Kakhaki***

Received: 29 May 2012

Accepted: 7 Jan. 2013

Abstract

Iran's past experiences show that fluctuations in foreign exchange earnings require adopting the policies for increasing non-oil exports, particularly agricultural products. Saffron is one of the most important agricultural export products in Iran and identifying the factors that influence its domestic and foreign markets is very important. In this study, three main factors were examined and discussed by applying the Delphi-fuzzy method and through interviewing 45 experts and completing corresponding questionnaires. The results showed that very high capital requirements is the main disadvantages and problems in the packaging of saffron, and the lack of an appropriate advertising and of a doctrine of civic responsibility in economic damages are respectively the most important factors for brand, and for the e-commerce of saffron. Also, improving and expanding the use of e-commerce on saffron trade through widening its accessibility in urban and rural areas is recommended. This can be achieved by further expansion of IT in the universities.

JEL Classification: Q13

Keywords: Packaging, Brand, E-commerce, Delphi-fuzzy Method

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Effects of trade liberalization on welfare of crop consumers and producers, virtual water trade, and resource sustainability: A case study in Fars Province
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Received: 18 Dec. 2011

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Abstract

The free trade for agricultural products has improving effects on the economic welfare. Analyzing this policy was a key goal for many countries in the last decade. On the other hand, the virtual water trade is discussed as an option in the water policy issues for sustainable use of water resources, especially in arid and semi-arid countries such as Iran. This study examined the effects of two policies including with and without trade liberalization of agricultural productions on economic welfare, virtual water trade and water resources sustainability. This analysis was carried out using a positive mathematical programming model as a case study in Fars Province, Iran. Results showed that the trade liberalization affects virtual water traded by various crops differently. Overall, this policy reduces the net virtual water export and secures the water resources sustainability in the studied area. Moreover, trade liberalization policy improves the net welfare for crops consumers. However, the net welfare for crops producers is dependent on changes in the crop patterns before and after the policy implementation.

JEL Classification: H53, F1

Keywords: Trade liberalization, virtual water, sustainability, welfare, positive mathematical programming

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Estimating Value of Non Use Services of Agricultural Lands for Residents with Choice Experiment Method(Case of Mazandaran Province)

S. Hashemi Bonab, G. Sharzehi, S. Yazdani*

Received: 4 Apr. 2011

Accepted: 3 Oct. 2012

Abstract:

Neglecting objectives such as environmental and social values of various land use, has resulted in irreversible conversion of agricultural lands to urban and industrial lands. In Mazandarn province despite the existence of very fertile agricultural lands and unique nature, abnormal development of tourism has caused increase in demands for second home and villa and extensive change in agricultural land use that may have considerable economic, social and environmental damages for this region. This study estimate value of non-use services of agricultural lands form residents viewpoint, which will be completely disappeared by building. Results show that, depend on type of land, resident's willingness to pay to preserve agricultural lands varies up 22.6 million Rial for dry lands to 113.26 million Rial for gardens. Average willingness to pay for paddy fields, is estimated to be 105.119 million Rial. The results indicate agricultural lands have high non-market benefits that not considered in cost-benefit analysis of national projects.

JEL Classification: C350, Q510

Keywords: Choice Experiment, Willingness to pay, Land Use Change, Agricultural Lands, Non- Use Services

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Estimating agricultural credit demand: case study of sunflower producers in Khoy County

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Abstract

Capital shortage is one of the most important restricting factors for activities and innovations in agriculture. The insufficiency in deprived areas such as Khoy in West Azarbayjan is more intense. Therefore, financial contribution to these farmers is necessary. In this study, effective factors on Khoy credit demand are investigated by interviewing 70 sunflower producers. The results showed that in 2009, demand for credits are dependent on family labor force, cultivation land and agricultural machinery. Moreover, banking credit demand quantity has a direct relationship with product prices. For 1% increase in product price, demand for credit increases about 1.67 percent, but increase in interest rate has negative effect on credit demand. Finally, according to empirical results of this study, we suggest that the banking credit demand has a clear and optimized behavior, and the interest rate has decies for farmers.

JEL Classification: Q32, C53

Keywords: Interest Rate, Private Capital, Demand of Credit, Sunflowers Producers, Shepherd Lemma

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