Determinants of Rural Households' Food Security

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Received: 14 Oct. 2012 **Accepted: 15 Apr. 2013**

Abstract

Ensuring food security is one of the millennium development goals and alleviating current hunger levels is considered in many countries. Yet, 923 million individuals are undernourished globally. Furthermore based on estimations reported by United Nations Food and Agriculture Organization, the large majority of food-insecure individuals live in rural areas of developing and less developed countries. Therefore, study of food security among less advantage sector of population is of great concern. The purpose of this survey study was to identify determinants of food security among rural households in Kiar County, Iran. A stratified random sampling technique was used to collect data from a representative sample of wheat growers. A total of 352 farmers were interviewed using a questionnaire in 2007. A panel of experts verified face validity and a pilot study was used to assess the reliability of the measuring instrument. "Food security score" was applied to measure the degree of households' food security. The findings revealed that 53.9 percent suffered from food insecurity. Also, analysis of structural equation model indicated that per capita income, household unemployment ratio, and access to agricultural machineries are the main determinants of rural households' food security. Moreover, wheat yield and adoption level of agricultural technologies indirectly affect their food security. Therefore, enhancing total factor productivity in agriculture, improving technical efficiency of farming systems, investing more in farm machinery and equipment and developing rural non-farm economy should be considered to increase food security among rural households.

JEL classification: Q12, Q18
Keywords: Food security, Rural household, Food security score, Kiar County, Iran.

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Economic and Agronomic Impacts of Laser Land Leveling in Fars Province

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Received: 24 July. 2012 **Accepted: 8 July. 2013**

Abstract

Uneven land is one of the reasons of low irrigation efficiency in agricultural sector. Then, land leveling as one of the strategies of increasing the application of inputs, particularly water, is taken into account by experts and specialists and it has absorbed large amount of budget of Iran. The purpose of this research was to investigate economic and agronomic impacts of laser land leveling. The survey research was used to collect data in Fars Province. The sample consisted of 258 farmers which were selected using multi-stage random sampling. The results revealed that laser land leveling reduces the amount of consumption and cost of inputs such as water, fertilizer, pesticide, fuel and labor. Water use efficiency has been increased 52 percent by application of laser systems. Also this project increases wheat yield, gross income and land price and decrease time needed for land preparation, planting and harvesting. The amount of water, fertilizer and seed consumption decrease and yield increase over time. Finally, based on the results the improvement of farmers' information about the impacts of project, change the attitude of farmers about water resources management and providing facilities for poor farmers have been suggested.

JEL Classification: O33,O22

Keywords: Laser Land Leveling Project, Assessment, Economic Impacts, Agronomic Impacts, Fars province.

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Aggregation of Price Risk over Commodities; Case Study: Price Risk of Protein Products

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Received: 21 Nov. 2012 **Accepted: 10 Jun. 2013**

Abstract

The aggregated data of price risk over commodities is used inevitably in some empirical studies. The common approach to aggregating price risk is to calculate a variance of aggregate price risk index. However, this approach has no basis in index number theory. For example, a normal distribution that mean and variance change over time, these parameters are independent constructs and hence can evolve separately over time. In this study, using an extended theory of index numbers, aggregated price risk of proteins products was calculated in 1997-2008 periods. Results show that variance of aggregated price risk has weak correlation with correct indexes and hence cannot be used in empirical studies.

JEL Classification: D81, C43
Keywords: Aggregation, Index number, Price risk

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Study of Influential Factors on Acceptance of Agricultural and Horticultural Products Insurance
Case Study: Sari and Ghaemshahr Townships - Mazandaran Province

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Received: 3 Sep. 2012 **Accepted: 6 May. 2013**

Abstract

Detection of influential variables on acceptance of agricultural and horticultural products insurance by farmers can improve the proper policy making processes in this section. In this study, several variables such as bank loans beneficiation, number of family members, cultivation area (ha), damage compensation, participation to promotion classes, farming experiences (year), education level, age, income source, and awareness of farmers regarding the agricultural products insurance was taken in to consideration as the basic variables in admission or rejection of insurance of the citrus and paddy products in Sari and Ghaemshahr townships. Logit model results indicated that some variables such as number of family members, education level and income source had direct and significant effect on the citrus insurance acceptance by farmers whereas some other variables such as cultivation area showed the inverse significant effect in this regards. Furthermore, in case of paddy farmers, variables such as age, bank loans beneficiation and income level directly and significantly affected the insurance acceptance whereas, numbers of family members have a negative effect in this regards.

JEL Classification: C49, G22, I39.
Keywords: Agricultural and horticultural products, Insurance acceptance, Logit model, Mazandaran Province .

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Determining Tariff Equivalent of Non-Tariffs Barriers in Agricultural Sector of Iran: An Application to Import Elasticity Method

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Received: 11 May. 2012 **Accepted: 2 Jun. 2013**

Abstract

As tariff barriers among nations have declined in recent years due to free trade agreements, non-tariff barriers (NTB_s) have increasingly become the way that governments restrict trade. The objective of this paper is to measure tariff equivalent of non-tariffs barriers (TE of NTB_s) in agricultural sector of Iran using import elasticity approach over the period 1981 to 2007. For this purpose, we first estimate the quantity-impact of NTBs (including two broad types of NTBs —Core NTBs; import quota, technical regulations, as well as monopolistic measures and agricultural domestic support) on imports using log-linear model of import demand with assuming constant return technologies. Then, we convert the quantity impact of NTB_s on imports into a tariff equivalent based on import demand elasticities. The results shows the average TE of NTB_s for 9 group products are: -3.43% for wheat, 0.61% for rice, 1.74% for barely, 1.12% for maize, 3.13% for soybean, 1.67% for meat, 0.47% for oil, 2.18%for sugar and 7.92% for banana. Therefore, we can also conclude that non-tariff barriers imposed on all products have the protective role except for wheat.

JEL Classification: D63, F13, Q17
KeyWords: Trade, Non-Tariff Barriers, Tariff Equivalent, Import Elasticity Method

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Supply Responses to Changes in Agricultural Commodity Prices in Asian Countries

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Received: 10 Sep. 2012 Accepted: 28 Apr. 2013

Abstract

Food price Variable as a key factor that affect supply and demand for food and agricultural products has been regarded by policy makers. objective of the Present study is to examine Supply responses to price changes in selected Asian countries for agricultural commodities, Wheat, maize and rice by Using the panel data for the period of 1997-2010.results shows that yield response to price changes is in Asian countries0.53, for rice 0.12 and wheat 0.02.Sience, One percent increase in prices of rice, wheat and maize in Asia countries, yield of this commodities less extent increase, therefore, policy perspective of this study is Special price policy should be done To protect and increase the supply of food grains in developing countries.

JEL Classification: D2, D20, D22

Keywords: Supply responses, agricultural commodities, Panel data, Asian countries.

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ABSTRACTS

Contents:

Agricultural Economics
Journal of Iranian Agricultural Economics Society

Vol.7/No.1/2013

Publisher: Iranian Agricultural Economics Society
Managing Director: Saeed Yazdani, PhD, Tehran University
Editor- in- Chief: Mohammad Bakhshoodeh, PhD, Shiraz University
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