

Valuing the attributes of renewable energy investments in Khorasan Razavi Province, Iran

Ahvan Kaseb, Mohammad Ghorbani, Alireza Karbasi , Mohammad reza Kohansal¹

Received: 5 Dec. 2014

Accepted: 31 Oct. 2015

Abstract

In recent years, attitude to energy issue have been changed in Iran. The nonrenewable fossil energy and the other hand a steady rise of prices and implementation plans such as “Targeting subsidies” have been forced governments to turn to new energies collection. Adoption and development of appropriate policies and strategies for investment on renewable energies need to analyse of investment advantages on it according to households' willingness to pay. This paper carried out to valuate the investment's attributes in the renewable energies using a cross sectional data of 250 households and 4518 observations in 2014 from the Khorasan Razavi province and applying the choice experiment and nested logit model. Nested logit model estimation with socio-economic variables showed that age, house's ownership and having car have positive and significant effect on the level of willingness to pay. Also, decreasing air pollution and increasing of employment is worth more for urban households. They have willingness to pay equal 48033 and 34947 Rials per month to air pollution and employment, respectively. On the other hands, they have not value to landscape impacts and have willingness to pay equivalent 1669 Rials per month to it. Regard to results, execution of this study as a complete plan in a periodically (3-4 year) in Iran to study of executed policies about renewable energies has suggested.

JEL Classification: Q50

Key words: Choice Experiment, Renewable energy, Nested logit

¹Respectively: Master of science student and Professors of Agricultural Economics. Ferdowsi University of Mashhad
Email: ghorbani@ferdowsi.um.ac.ir

**Assessment the effective component of seafood consumption
in Mashhad
(Comparison of Double-Hurdle model and Heckman two-
stage method)**

Arash Dourandish, Masud Hosseinzade, Zahra Nematollahi¹

Received: 9 Feb. 2015

Accepted: 9 Oct. 2015

Abstract

Due to the high value of sea foods and importance usage of them in individual and social health, the present study was designed to investigate on the effective factors in aquatic consumption in Mashhad. The consumption information of 150 Mashhadian households that collected by random sampling has been used. The results have analyzed using Heckman's two-stage model and Double- Hurdle model. The results showed that, household population, education level of households' administrator, number of persons under 10 years old, income, factors related to taste, access to fish, knowledge of methods to preparing and cooking aquatic and health-related factors, are important for household to consumption of aquatic. Due to the results of Double-Hurdle model, Education, income, occupation of households' administrator, residential area, Factors associated with taste, knowledge of methods to preparing and cooking aquatic and aquatic health, have the significant effects on Action with households to consume aquatic. According to the results and Double- Hurdle model excellence in this study, this method is recommended as an alternative method for use in studies.

JEL Classification: C51, I18, Q18

Key Words: consumption, aquatic, Double- Hurdle model, Heckman two-stage method, Mashhad.

¹Respectively:Assistant Professor of Agricultural Economic Department, Ferdowsi University of Mashhad, Ph.D student of Agricultural Economic Department, University of Zabol & Ph.D student of Agricultural Economic Department,Sari Agricultural Sciences and Natural Resources University
Email: adourandish@gmail.com

The relationship between carbon dioxide emissions and energy consumption and environmental destruction in Iran

*Hamid Amirnejad, Mohamad Zargartalebi and Mohamad Ali Roshanfar*¹

Received: 11 Jan. 2015

Accepted: 28 Nov. 2015

Abstract

During recent decades, the importance of environmental issues, all countries are trying to plan properly and using appropriate methods, not only to achieve their economic goals, but also to minimize the environmental damage caused by economic growth. Accomplish this without the knowledge of the relationship between economic activity and environmental pollution and the interplay between them is not possible and the problem for developing countries such as Iran, which is still in the early stages of economic development, has become more important. In this paper, short-run and long-run relationship between energy consumption, carbon dioxide emissions (as an indicator of environmental pollution), using data from 1974-2011 of Iran were studied. To investigate the relationship between the variables, the econometric regression methods Distributed Lag (ARDL) were used. The results showed that carbon dioxide emission relative to environmental degradation and its value in the long-run elastic 2.27. According to the results of variable energy consumption and carbon dioxide emissions significant positive and a long-term relationship with environmental degradation. In this case, the increase of energy consumption and carbon dioxide emissions further, environmental degradation is more; the comparison results show that short-run and long-term relationships Energy consumption in the short term greater impact on environmental degradation and destruction of carbon dioxide emissions in the long-run have a greater impact on the environment. The results show that the imbalance short term after two terms are moderated.

JEL Classification: C22, O13, Q53, Q56

Key Words: Carbon Dioxide Emissions, Energy Consumption, Environmental Degradation, Auto Regressive Distributed Lags

¹Respectively. Associate & MS.c student and Ph.D student of Agricultural Economics, Sari University of Agricultural Sciences and Natural Resources.
Email: hamidamirnejad@gmail.com

Estimating the Recreational Value of Taham Watershed Rangelands in Zanjan by Using a Contingent Valuation Method

Hassan Yeganeh, Hamed Rafiee, Iraj Saleh, Ahmad Bazgir¹

Received: 9 Nov. 2015

Accepted: 28 Nov. 2015

Abstract

Taham watershed as one of ecotourism attractions and geo-tourism in Zanjan province is an important zone of tourist. Thus, study of recreational value can be effective in predicting needs and shortages and tourism development in the region. The aim of this research is the estimation of recreational value of Taham watershed and measurement of individual's willingness to pay (WTP) based on contingent valuation method (CVM) and dichotomous choice (DC). Required data were gathered through 181 visitors in the zone. The results showed that annual variables of visit number, education, income, indigenous persons and bid amount are significant and effective factors on WTP. The mean of WTP for recreational value of this rangeland is 6266 Rials for per per visitor and total recreational value of rangeland is annually about 539062303 Rials that visitors that it shows the visitors attention to the recreational resources in the zone.

JEL Classification: Q26, Q51, Q57

Key Words: Contingent valuation, Logit model, Willingness to pay, Rangelands of Taham watershed and Recreational value.

¹Respectively: Assistant Professor, Gorgan University of Agricultural Sciences and Natural Resources, Iran. Assistant Professor & Assoc. Prof. of Agricultural economics of Tehran University & PhD students of Forestry of Lorestan University
Email:yeganeh@gau.ac.ir

Deficit Irrigation and Improving Irrigation Technology; the Optimal Adaptation in Coping with Climate Change

Shiva Soltani and Seyed Habibollah Mosavi¹

Received: 28 Sep. 2015

Accepted: 29 Nov. 2015

Abstract

In this study, deficit irrigation strategy as a lasting solution to deal with the effects of climate change in Hamedan-Bahar plain, were examined. For this purpose, at first, the effects of changes in temperature, precipitation and the release of CO₂ on cropping pattern in four economic, physiology, hydrology and meteorology dimensions were analyzed. The results indicated that increased levels of carbon dioxide emissions and the climate changes, by reducing yield of agricultural crops and reduce groundwater balance, have negative effects on cropping pattern and in the most pessimistic prediction, reduce the amount of the agricultural value added about 169 billion Rials, reduce the amount of groundwater resources the extent of 11 percent and increase the economic value of water by 21 percent will be followed by 2040 in Hamedan-Bahar plain. However, the mentioned lose will be offset with the policy of 5% optimal deficit irrigation and the use of modern irrigation technologies.

JEL Classification: Q54, Q25, C61, C46, C33, C22, C02

Key Words::: Deficit irrigation, carbon dioxide, climate changes, groundwater resources, economic value of water

¹Respectively: Ph.D. Student and Assistant Professor of Agricultural Economics, Tarbiat Modares University.

Email: shamosavi@modares.ac.ir

Measuring Impact of Rising Food Price on Iranian Urban Households Welfare

Mohammad Ghahremanzadeh, Mohammad Bagher Ziaei, Esmail Pishbahar, Ghader Dashti¹

Received: 19 Sep. 2015

Accepted: 3 Jan. 2016

Abstract

The objective of the study is to measure welfare effects of food price on Iranian urban households within 10 income deciles between 2009 and 2012. Food consumption behavior in Iran is analyzed by estimating a complete food demand system using Quadratic Almost Ideal Demand System (QUAIDS) with considering homogeneity and symmetric conditions for 9 major food groups for each income deciles. The elasticity coefficients derived from QUAIDS were used to evaluate the distributional impacts of the relative food price changes in terms of Compensated Variations (CV). Based on our estimates, the food groups of cereals, dairy products, vegetable and pulses, Potables and Spices are necessary goods, as their budget elasticity is positive and below one at the same time. Meat, edible oils, fruits and dried fruits and Sugary products are luxury goods, with income elasticity above one. Results showed that all urban households groups, suffered welfare losses from rise in the food prices during 2009 and 2012. In addition for households in the lower deciles need the greatest relative amount of new income to return to pre-reform consumption levels and, indeed, this amount declines monotonically as household expenditures increase. Also the relative loss of poorest urban households is about threefold than the loss of richest households, which demonstrates the vulnerability of these households to food price increases. Consequently, it is essential that the policy makers support the poor households.

JEL Classification: I38, Q11, Q18

Keywords: Welfare Effects, Food price raise, Deciles of consumption, QUAIDS, Compensated Variation (CV)

¹Respectively: Associate Professor, Department of Agricultural Economics, Faculty of Agricultural Economics, Tabriz University, Master of science Agricultural Economics, Tabriz University & Associate professors in Agricultural Economics, Tabriz university
Email: GhahremanZadeh@Tabrizu.ac.ir

Analysing the Role of Economic Variables on Food Prices in the Selected Oil Exporting and Importing Countries

Reza Hezareh, Naser Shahnousi, Hossein Mohammadi, Seyed Mehdi Saghaian¹

Received: 30 Aug. 2015

Accepted: 17 Jan. 2016

Abstract

Fluctuation in food price and its effect on food security and society welfare has led economists to be interested in evaluating factors affecting the food price; Identifying these factors is an appropriate approach to reduce the negative consequences of such a fluctuation. The aim of this study was to evaluate the effect of economic variables on the food price index of oil exporting and importing countries during 2000 to 2013. The monthly data was provided for this period. For this purpose, in this study was used of Panel vector autoregressive models. Regression model coefficients revealed the effect of oil price lags on the food price to be more obvious in exporting countries in comparison to those of importing ones. On the other side, the results of impulse response function showed that food price and interesting rate shocks had a transitory effect, while oil price, fertilizer price and exchange rate shocks had permanent effects on the food price. In addition, the results suggested the food price shocks to consist more than 90% of fluctuation in both exporting and importing countries.

JEL Classification: C0, C13, C22, C32, C54, C82, E31, O24

Keywords: Oil Price, Exchange Rate, Panel Var, Commodity Food Price

¹Respectively: Ph.D student, Professor and Assistant of Agricultural economics, Ferdowsi University of Mashhad & Associate of Agricultural economics, University of Kentucky
Email: Hezareh_r@yahoo.com

Ex-Ante Assessment of Agricultural Research Impacts under Risk in Caspian Coastal Plain, Dry Central and West North Zones

S.S.Hossini, N.M.Abyar, S.Salami and R.Peykani¹

ceived: 28 July, 2015

Accepted: 28 Aug, 2015

Abstract

Agricultural research systems in the public sector of developing countries have entered the era of resource scarcity. Therefore financing and support economic policy makers from this research will be required to provide documentary evidence. Without specific and convincing documentation of benefits, Agricultural research can not receive sustainable funding supports. This research has been conducted in order to assessment of potential benefits of breeding research in three agro-climatic zones of Iran. Results while creating awareness can convince and persuade the policymaking and planning system to support agricultural research. In order to conducting this research, has been used from economic surplus model that can offer useful and effective outputs from potential benefits of research. Based on findings, most of breeding researchs have acceptable economic benefits and can play a fundamental role in increasing production and supply of agricultural products. This finding emphasis on necessary support and funding of agricultural research and its uncertainty management in farmers conditions that apply research technologies.

JEL Classification G17, D61, Q18

Keywords: Economic Surplus Model, Breeding research, Simulation. Agro-climatic Zones, Risk,

¹Respectively: Professor of Agricultural Economics of University of Tehran, PhD student of university of Tehran, Professors of Agricultural Economics of University of Tehran
Email: nmabyar_ae@ut.ac.ir

Simulation Farmers' Response to Increasing Prices of Agricultural Products Policy: Case Study Cities of Qazvin Province

Abozar Parhizkari, Saeed Yazdani, Mohsen Shokatfadaee, Gholamreza Yavari¹

Received: 20 Jan. 2015

Accepted: 28 July. 2015

Abstract

The main objective of this study is to simulate farmers's response to the increasing prices of agricultural products policy in the cities of Qazvin province. For this purpose, the corn in city of Alborz and tomatoes in city of Abyek that have high volatility in the market price were studied. To achieve this goal, an economic modeling system consists of the Positive Mathematical Programming and State Wide Agricultural Production Function was used. In following the farmers's response to the increasing prices of agricultural products policy under the scenarios 10, 20, 30, 40 and 50 percent was simulated and created changes in cropping pattern and farmer's gross profit were analyzed. The required data were related to the year 2011-2012 that with referring directly to the relevant organizations in Qazvin province were collected. To solve the model from GAMS software version 23/5 was used. The results showed that with increase in the price of tomatoes and corn, farmers cities of Abyek and Albrz tends to increase the acreage of these crops to achieve the more profits and decreases the acreage of products with lower returns (wheat and water barley). Also, the results showed that under scenarios of 10 to 50 percent, increases the farmer's gross profit of Abyek 4/18 to 20/39 percent with increasing the price of tomato and increases farmer's gross profit of Alborz 3/02 to 19/4 percent with increasing the price of corn. In the end, to effectiveness of the increasing prices of agricultural products policy, the use of supplementation policies in the supply side of inputs and products and also the use of auxiliary policies in the water resources side simultaneously with this police were proposed.

JEL Classification: C61, D22, E37, Q18

Keywords: Economic Modeling, Positive Mathematical Programming, Regional Production Function, Pricing of Agricultural Products, Farmer's Gross Profit, Qazvin Province.

¹Respectively: PHD student of Agricultural Economics in PNU, Professor of Agricultural Economics in Tehran university, Associate Professor and Assistant Professor of Agricultural Economics in PNU
Email: Abozar.parhizkari@yahoo.com

**A Survey of Iran's Pistachio Market Integration, An
Application of Threshold Spatial Price Transmission Models**
Afsaneh Nikoukar¹

Received: 15 June. 2015

Accepted: 26 Sep. 2015

Abstract

In integrated markets, price shocks in one market are answered in the other markets. Under these conditions, price differences of homogenous commodities in various markets arise from transit costs. Survey of spatial price transmission is one of the methods for studying market integration. With this point of view, spatial price transmission process of pistachio is studied in threshold price transmission models framework. Threshold price transmission models from producer province (Kerman) to consumer provinces (the other provinces of Iran) were estimated by using monthly retail price index data of pistachio for March 2007 to February 2013 period. The results showed that there is positive asymmetric price transmission in the most provinces of country in short-run and marketing agents gain extra benefits and consumers loss from different speed of market integration when price decreases compared with when price increases. But at the whole, markets are integrated in long-run and there is no long-run asymmetric price transmission. With attention to the almost competitive structure of pistachio market at retail level, asymmetric price transmission probably arise from inflation, inventory management, adjustment costs and asymmetric information. Thus, ant inflation policies, assembling market information systems and creating stock market help to the symmetric price transmission and more integrated markets.

JEL Classification: Q02

Keywords: Spatial Price Transmission, Iran, Pistachio, Market Integration, Threshold Error Correction Model

¹ Assistance Professor of Agricultural Economics, Agriculture Department, Payame- Noor University, Tehran, Iran
Email: anikoukar57@gmail.com

ABSTRACTS

Contents:

A Survey of Iran's Pistachio Market Integration, An Application of Threshold Spatial Price Transmission Models

A.Nikoukar

Simulation Farmers' Response to Increasing Prices of Agricultural Products Policy: Case Study Cities of Qazvin Province

A.Parhizkari, S.Yazdani, M.Shokat fadae & GH.Yavari

Ex-Ante Assessment of Agricultural Research Impacts under Risk in Caspian Coastal Plain, Dry Central and West North Zones

S.S.Hosseini, N.Abyar, H.Salammi & GH.Peykani

Analysing the Role of Economic Variables on Food Prices in the Selected Oil Exporting and Importing Countries

R.Hezareh, N.SHahnoushi, H.Mohammadi & S.M.Saghaian

Measuring Impact of Rising Food Price on Iranian Urban Households Welfare

M.GHahremanzade, M.Ziaei, E.Pishbahar & GH.Dashti

Deficit Irrigation and Improving Irrigation Technology; the Optimal Adaptation in Coping with Climate Change

SH.Soltani & S.H.Mosavi

Estimating the Recreational Value of Taham Watershed Rangelands in Zanjan by Using a Contingent Valuation Method

H.Yegane, H.Rafiee, I.Saleh & A.Bazgir

The relationship between carbon dioxide emissions and energy consumption and environmental destruction in Iran

H.Amirnezhad, M.Zargar talebi & M.Roshanfar

Assessment the effective component of seafood consumption in Mashhad (Comparison of Double-Hurdle model and Heckman two-stage method)

A.Dourandish, M.Hosseinzadeh & Z.Nematollahi

Valuing the attributes of renewable energy investments in Khorasan Razavi Province, Iran

A.Kaseb, M.GHorbani, A.Karbasi & M.Kohansal



Agricultural Economics
Journal of Iranian Agricultural Economics Society

Vol.9/No.4/2016

Publisher: Iranian Agricultural Economics Society
Managing Director: Saeed Yazdani, PhD, University of Tehran
Editor-in-Chief: Seyed Safdar Hosseini, PhD, University of Tehran
Editorial Manager: Hamed Rafiee, PhD, University of Tehran
Executive Manager: Sara Zargarazad, M.Sc

Editorial Board:

| | |
|-----------------------------------|--|
| <i>M. Bakhshoodeh, PhD</i> | <i>Shiraz University</i> |
| <i>S. Hoseini, PhD</i> | <i>Tehran University</i> |
| <i>S. Dehghanian, PhD</i> | <i>Ferdowsi University of Mashhad</i> |
| <i>H. Salami, PhD</i> | <i>Tehran University</i> |
| <i>G.R. Soltani, PhD</i> | <i>Shiraz University</i> |
| <i>G. Sharzei, PhD</i> | <i>Tehran University</i> |
| <i>D. Salehi- Isfahani, PhD</i> | <i>Virginia Polytechnic Institute and State University</i> |
| <i>M. Koopahi, PhD</i> | <i>Tehran University</i> |
| <i>R. Mohammad Rezaei, PhD</i> | <i>Tabriz University</i> |
| <i>H. Mehrabi Boshrabadi, PhD</i> | <i>Kerman University</i> |
| <i>B. Najafi, PhD</i> | <i>Shiraz University</i> |
| <i>S. Yazdani, PhD</i> | <i>Tehran University</i> |

Address: Journal of Agricultural Economics, Collage of Agricultural Economics and Development, Agriculture & Natural Resource Paradise of Tehran University, Karaj, Iran.
Tel: (+98) 26-32222767
Fax: (+98) 26-32247783
Email: iaes.journal@gmail.com
www.iranianjae.ir