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Contents:

ABSTRACTS

Factors affecting poverty in Fars province: Application of spatial econometric approach

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The objective of this study was to investigate the factors affecting poverty and to determine poverty map of Fars Province urban areas using spatial econometrics approach. The dataset were obtained throughout 320 urban households participated in household expenditure survey of 2005. Moran's I value for poverty was -0.2125, indicating negative spatial autocorrelation. Moran's scattering graph also showed that most of townships and their neighbors may be placed into poverty subgroups of high-low and low-high. Results revealed that variables of family size, household head gender, percentage of household owning housing and type of employment have significant effects on poverty incidence. Results indicated that the spatial lag and error models have considerable improvement over OLS model.

JEL Classification: C21, I32.

Keywords: *Poverty, Spatial Econometrics, Fars Province*

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Investigating the relationship between Cultivation's age and total factor productivity of sugar cane production (Case study of Imam Khomeini agro-industry, Shooshtar)

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The decline of government in supporting sugar cane industries and the dumping of competitor countries' sugar prepared the ground for the large sugar-cane agro-industries to face with the problem of losing their profitability. Hence, currently to protect the employment rates of Khuzestan province, and to continue the grasp of investments benefits from past sugar cane cultivation, from among the available solutions, considering the productivity augmentation, and improvement of the province's production power in its agro-industries seems to be the best solutions for the protection of such industries in the ground of competition. Thus, here the determination of some effecting factors on total factor productivity of sugar cane production, and the effects of intensity of these factors are tried to present some solutions for the minimization of the effects of increasing age of the shoots on productivity decline. In this study, stratified sampling method were applied to select three varieties of the early (CP57-614), the clay (CP48-103) and the late (CP69-1062) of sugar cane (planted in this cultivation and farming industry in 2006) and 191 units of 530 farming units (planted in the year). The results showed that total productivity of production factors of sugar cane will increase by decreases in current water consumption rate, increases in the scales of the units, more consumption of nitrate fertilizers and machinery, some delays in harvesting time of the arable units, and missing the harvest of future year,. Also, the reciprocal effects of age with other factors indicated that the larger units with older ages are more productive. Younger units should be harvested at the beginning of the harvesting season, and the older units at the end.

JEL Classification: D24

Keywords: *Age of cultivation, Imam Khomeini agro-industry, sugar cane, total factor productivity*

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Investigation of the possibility of increasing trust in the domestic pistachio marketing in Iran: a case study of Kerman Province

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Agricultural product market is a system of relationship among buyers and sellers. Trust as a factor which supports these relationships, leads the trading to its goals. In this study, using a sample of 110 farmers and 119 pistachio traders, trust situation in pistachio market and its determinants were investigated in Kerman province. Stratified random sampling method was used and Pearson correlation coefficient and regression method were applied to the data. Results showed that age, experience, being as an exporter, scale and living in town have positive and significant effects on quantity of trust. In contrast, education has negative effect in this regard. From the farmers and traders points of view, the most important factors that enhance trust in pistachio market are buyers' reputation and capital. They also believe that delayed payment of pistachio price by buyers and lack of quality criteria for pricing are the factors that reduce trust. Measuring willingness to pay for increasing trust in pistachio market showed that pistachio producers and traders are ready to pay 279.07 and 507.43 Rls per kilogram, respectively. Finally, four tools were proposed for enhancing trust in pistachio market. They are designing an institute or organization to guarantee trading between buyers and sellers, declaring irrecoverable and delayed checks of buyers by banks, establishing an office for gathering suggestions, and holding meetings between buyers and sellers. The priority of these tools was distinguished by respondents.

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Estimation of iran agricultural products demand functions using mathematical programming (Application of maximum entropy method)

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Application of Generalized Maximum Entropy (GME) as a procedure in demand function estimation was the main purpose of this study. The demand functions of 35 major agricultural products were estimated in the form of 14 commodity groups. The own and cross demand price elasticities were calculated for these groups. Required data were obtained from average prices and aggregated consumption quantities of Iran agricultural products in 2008. Results showed that demand quantities of the most commodity groups are less elastic to price changes. On the other hand, since the model includes the major part of agricultural products, it is similar to an agricultural sector equilibrium model. Therefore, a change in consumption amount of each commodity group should affect consumption amount of other groups. Consequently, the signs of majority of cross elasticities were positive, which shows substitution relation among commodity groups. In other words, by decreasing the amount of one commodity group in consumption basket, people substitute commodity of other groups. Comparing the results of the current study with previous studies in Iran upholds maximum entropy method as a suitable alternative for econometrics methods for estimation functions, especially when sufficient data is not available or collecting sufficient data needs much time and costs.

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Identifying beneficiary households for cash payments in Iran based on Proxy Means Test

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Targeting the protecting programs such as subsidies requires identifying the poor in the society. In order to recognize beneficiary households for cash payment after subsidy reform in Iran, Proxy Means Test was applied in this study to households' survey data of 2009. Based on the findings, it is possible to identify the poor not based on their claimed incomes but according to their total scores calculated by their traits, asset ownership and places of living. Those who own car, motorcycle, PC, have their own orchard and invested on fixed assets and/or live in houses larger than 100 m^2, for instance, are found not to be beneficiaries. Moreover, the government can protect reasonable people by choosing targeting line of 40% in the society.

JEL Classification: C13, D18

Keywords: *removing subsidies, cash payment, Proxy Means Test*

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Investigating the impact of inflation uncertainty on prices of agricultural products

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Inflation rate in Iran has been a growing concern despite the intense struggles, gradually becoming the country's economic problem. This study investigated the influence of inflation uncertainty on price indexes of agricultural products using time series data of 1974-2007. The inflation uncertainty is estimated applying GARCH models. The desired model was evaluated by vector autoregression(VAR). Impulse response functions (IRF) and variance decomposition has also been checked. Impulse response functions in the agricultural sector against shocks from factors of value-added agriculture, degree of trade freedom, real exchange rate, the volume of liquidity, inflation uncertainty and the consumer price index to price index of agricultural products during ten periods in the future were examined.The variance decomposition results indicated that the agricultural sector   in   the   short-term, mid-term and long-term, more volatility prices of agricultural   products are   explained by shocks. Results   also   revealed   that   from   the VAR test in   the agricultural sector indicated that inflation uncertainty together with other variables positively and significantly affects the price index of agricultural products. Thus, this variable should be taken to account in order to analyze price behavior of agricultural products and their determinants.

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Investigating factors affecting acceptance time for laser land leveling in Fars province

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Providing strategies to increase water efficiency is one of the vital policies in agricultural sector. In this study, survival analyzing model was applied first to investigate factors affecting duration of accepting laser land leveling in centre of Marvdasht city. Then, the likelihood of accepting this technology by farmers was determined. Required data were collected by questionnaire based interviews from classified random sample of 240 farmers. Based on the findings of the survival analyzing model, age, agricultural background, education, extension classes, land under cultivation of crops, off-farm incomes, family size, financial shortage, small size of available lands and, lack of information about this technology and its benefits, have significant effects on delay in accepting laser leveling technology. Moreover, the possibility of accepting this technology by farmers has increased over time. That is around %60 of the farmers utilized the technology in 2007 and %86 in 2008. Based on the results, it is recommended to well inform farmers about the respected benefits of such technologies before introducing them in order to create sufficient incentives, and to provide financial supports, to facilitate accepting the technologies and consequently to increase water use efficiency in farms.

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Export productivity and trade specialization of agricultural products in the ECO

H. Nader, M. Salarpour and M. A. Roshanfar[*]

In this study, considering to the important role of the Economic Cooperation Organization (ECO) and significance of geo-economic and geo-strategic of its member states, we analyzed the commercial status of some of this organization's member countries that regionally have advantage. For this purpose, indices of trade among inter- specialization index, trade dissimilarity index and export concentration for altered agricultural products are used. Then, the factors influencing agricultural export productivity index was examined in the form of panel data model for these countries. The results illustrated that even though Iran has good condition within the inter-specialization index, but it suffers from low agricultural export productivity. Also, the most effective agent in agricultural exports productivity is economic freedom and agricultural population and area of agricultural land does not affect factors in agricultural export productivity.

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Study of poverty situation in rural areas of Kohgilouyeh va Boyerahmad province

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The aim of this study was to investigate the poverty situation in rural areas of Kohgilouyeh va Boyerahmad Province. Research data was collected from the supposed rural areas. Food poverty line was calculated using food energy intake procedure. Non-food poverty line, total poverty line, capita poverty line, poverty divide and the severity of poverty was also calculated in the study area. Results indicated that approximately 32% of samples were below the poverty line. Also, the results showed that there is a statistically significant difference between poor and non-poor people in some subjects such as age, using health care facilities, owning tractor, house, tap water, natural piped gas, kitchen and bath room, educated peoples of the family, welfare and social capital. Based on these findings it is recommended that more employments opportunities be provided in the supposed rural areas to increase the household income.

JEL Classification: I32

Keywords: *Poverty, rural areas, Kohgilouyeh va Boyerahmad*

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Application of the data envelopment analysis approach to production efficiency in greenhouse product in Fars province

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The objective of this study is to investigate the economic efficiency of the individual greenhouse farms in Fars province. This was done applying data envelopment analysis (DEA) in 2009. Results showed that technical efficiency of the farmers under the constant return to scale was ranges 35-100 percent with average of higher than 74 percent. However, the allocative efficiency was ranged between 81 and100 percent with average of 93 percent. But under variable return to scale technical efficiency and allocate efficiency were respectively 82.5 percent and 88.5 percent on average.

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