



Appraising the rate of rural entrepreneurs' success in Isfahan province with Analytical Hieratical Process and Factor Analysis

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Abstract

The major aim of this study is appraising the rate of rural entrepreneur's success in Isfahan province. The techniques of survey research such as direct observation and interviewing as well as structured questionnaire have been used for gathering appropriate data. For analyzing of the data Analytical Hierarchy Process (AHP) and Factor Analysis were applied. After primary study, based on the defined factors (indicators and indexes) 65 entrepreneurs were identified. Softwares, which have been used in this survey, are SPSS (the 11.5 version), Expert choice and Excel. Results showed that Innovation, establishment of internal units and the growth indicators can assess the rate of rural Entrepreneurs' success clearly. Also 80 percent of the rural Entrepreneurs in this survey have been allocated the middle to high successful rate.

Keywords: Rural entrepreneurs, success, Multiple Attribute Analysis, Analytical Hierarchical Analysis (AHP), Factor analysis

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The Effect of Range Management Projects on Pastures Efficiency (A Case Study in Khorasan Razavi)

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Abstract

If pastures become exploited correctly and also with reforestation and reformation, it would provide expected needs of agriculture section and also primary needs of raw materials in some part of industry. On the other hand, it becomes one of the safe bases of economy. So this study is about economic analyze of pastures assignment in framework of Lander grass projects in khorasan razavi province. In this order, by using two stage cluster sampling, at first amours 221 projects of pastures holding, 38 of them were selected from eleven cities of khorasan razavi province. Then randomized production function was estimated for these pastures. Basically, amounts of technical efficiency were calculated and also in this manner and rand cost function and its economic efficiency was earned. Results show that pasture holding projects in khorasan razavi cause to increasing in his production about twice (or duplicating his production in comparison with period before assignment). Also average amounts of technical efficiency of selected projects became 80 percent and for economic efficiency 35 percent, and finally about 44 percent in designation efficiency. Studying valid factors on inefficiency of pasture projects show that variables such as loan, pasture expanse, instructions and period of project performance have positive influence and variables such as; exploiter numbers have negative influence on technical efficiency of pastures.

Keywords: Technical Efficiency- Production Function- Range Management Projects- Khorasan Razavi

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The comparison of feasibility equation models of Variable Rate Technology-Irrigation in Fars and Khuzestan provinces

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Abstract

Variable Rate Technology-Irrigation (VRT-Irrigation) is a new approach of IT in agriculture to increase water efficiency in agriculture. With the application of VRT-Irrigation, water is used only in parts of farm that is needed. The purpose of this paper is to compare behavioral intention and attitude of agricultural experts in Fars and Khuzestan agricultural organizations toward VRT-Irrigation based on revised technology acceptance model (TAM). A survey was conducted using stratified random sampling to collect data from 135 and 114 experts in Fars and Khuzestan provinces, respectively. The results showed research models in this study are more powerful to predict behavioral intention and attitude than prior models. Based on the results, the independent variables have the difference power to predict intention to use, attitude to use and perceived usefulness of VRT-Irrigation in two provinces. There is not difference between two provinces regarding perceived usefulness. Based on the results some recommendations have been provided to use VRT-Irrigation in Iran.

Keywords: Variable Rate Technology-Irrigation (VRT-Irrigation), Revised Technology Acceptance Model, PLS-Graph software, Fars & Khuzestan Provinces

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Assessing the Transaction Costs of Agricultural Bank' Credits in Rural Iran

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Abstract

This study is conducted to examine the transaction costs of obtaining credit from Bank Keshavarzi (BK). High transaction costs are stated as an important factor that limits rural households to access credit in rural areas in developing countries. The data collected from the bank and also by a survey in a multi-stage sampling technique in 1383-1384. After estimating transaction costs of borrowing and lending, the econometric models used to determine the factors that affect the transaction costs of access to credits. The results highlight the importance of transaction cost in the borrowing and lending process. The results reveal that the transaction costs of gaining credit are equivalent to 915510 Rials, that is, an additional 2.68 percent annual interest cost. The average transaction costs of credit supply by BK is 3.4 percent of total costs. The econometric results showed that the size of loan and the experience, education level and information of the borrower are important determinants of the transaction costs.

JEI Classification: G21, G28

Keywords: Transaction Costs, Credit Markets, Bank Keshavarzi.

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Forecasting Iran's Selected Agricultural Products Retail Price Using Neural Network Auto-Regressive model with eXogenous inputs (NNARX)

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Abstract

In this study, the Neural Network Auto-Regressive model with eXogenous inputs (NNARX) was used to forecast the three perspectives ahead of Iran's rice, poultry and egg retail price, and to compare its performance with ARIMA model as the most common linear forecasting method. In order to achieve this purpose, the weekly data collected from the Iran State Livestock Affairs Logistics and Country's Welfare Supermarket (related to the period 2002:3-2008:6), and performance evaluation measures such as; R^2 , MAD and RMSE were used. The results of models performance evaluation showed that the non-linear neural network-autoregressive NNARX model outperforms the linear ARIMA model for all three forecasts and agricultural products.

Keywords: NNARX; ARIMA; Forecasting; Agricultural Products Retail Price

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Investigating personal and professional factors influencing farmers' perception towards problems of agricultural water management in Karaj County

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Abstract

The main purpose of the present study was to investigate personal and professional factors influencing farmers' perception towards problems of agricultural water management in Karaj County. The Statistical Population of the study consisted of 5297 farmers in Karaj County out of which 142 farmers were selected as sample using Cochran Formula for determining the sample size and stratified proportionate random sampling technique for reaching the samples. A questionnaire was developed for gathering data and information. It was validated through getting the viewpoints of some faculty members of the Department of agricultural Extension and Education, University of Tehran as well as some staff experts of the Ministries of Jihad-Agriculture and Power. The reliability of the main scale of the questionnaire was approved by Cronbach Alpha Coefficient which was equal to 0.76 indicated the tool of study is reliable. The data were later analyzed by SPSS-win. The results indicated that there was significant and positive relationship between farmers' perception towards problems of agricultural water management with their farming experience. In addition, the findings revealed that different groups of farmers classified based on grouping variable such as use of credit, water resources possession, educational level, farming systems, different technologies used for water exploitation were significantly different in terms of perception towards problems of agricultural water management. In addition, farmers categorized based on variables such as farming systems and water transfer method were significantly different in terms of facing problems of agricultural water management as showed by Kruskal Wallis. According to an overall conclusion, four factors viz., education, credit, technology and farming system structure are highly influential on reducing problems of agricultural water management.

Keywords: perception, agricultural water management, farmers, Karaj County

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The Investigation of Effective Factors on Farmers Participation with Wheat Supervisors in Zabol Township (Fuzzy Linear Regression Approach)

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Abstract

Agricultural protection has been pursuant and contentious for many years and the problem that has been favored for many researchers in three decades recent, is the relationship between researchers and farmers in production process. This study was about the investigation of effective factors on farmers Participation with Wheat Supervisors in Zabol Township. For this purpose, by using of fuzzy linear regression model, the effect of several factors consist of 10 indexes with the symmetric triangular and nonsymmetric triangular fuzzy numbers were investigated. The data were collected by completing farmer's questionnaires in 2008. The study tool's validity and reliability was evaluated by factor analysis method. The estimated coefficients showed that, awareness index, advancement motivation, modernism, job satisfaction and supervisor characteristics didn't have effect on participation in both symmetric and nonsymmetric cases and the farmer's expectation indexes, economic incentives, confidence, scientism, and fatalism were estimated in very low level. Therefore, according to results, it proposed to performance actions by related organizations such as promote experience level and supervisors skills, to become ready on time on basis on farmers needs, visiting by expert with supervisors on farms, making facilities for availability to science resource for problems cultivation, using experiences farmers, making different motivations on farmers and creating sample farms for seeing changes by supervisors.

Keywords: Supervisor, Wheat, Fuzzy Linear Regression, Zabol

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Liberalization of Trade and it's Effects on the Agriculture Sector of Iran

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Abstract

This study deals with the trade liberalization and it's subsequences on the agricultural sector of Iran during the years of 1967-2007. To this end on the basis of theories, the exports, imports, supply and demand functions of agricultural sector have been determined, and are regressed by the Vector Auto Regressive (VAR) methodology. Also to recognize the effects of different variables on the above mentioned functions, the methodology of variance detection is used. The results show that the trade liberalization have only an insignificant effect on the demand of agricultural products, but it has a meaningful impacts on the agricultural supply. While the liberalization variables does not have a meaningful impacts on the. imports of agricultural products, the exports of agricultural products are followed by the liberalization indices. This is due to the huge role of the government on the import of the agricultural products.

JEL: F 14, F 17, Q 17

Keywords: Trade liberalization, agricultural products, export, import, Iran

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Application of Data Envelopment Analysis in measuring analyzing relative efficiency of wheat cultivation: case of Khorasan Razavi

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Abstract

In this study, we have utilized DEA methodology to measure technical, managerial, as well as scale efficiencies of wheat cultivation in Khorasan Razavi province. Data was collected from annual report of 1387 agricultural production of province. Complementary research data was gathered from secondary sources and a semi-structured interview with the relevant regional experts. The Spearman correlation between agricultural knowledge of wheat producers and their actual production output indicated this variable is an effective production input. Technical efficiency was measured for both constant and variable in comparison to the scale. Moreover, technical efficiency was analyzed for managerial and scale efficiency. Result of our study indicated an average technical efficiency of 0.497 for the whole province. In addition, managerial and scale efficiency were counted 0.732 and 0.654 respectively. Our research further showed that from 17 cities of the province 12 percent (2 cities) are predicting wheat in line of optimum efficiency while 82 percent (14 cities) are above and 6 percent (1 city) is below the optimum scale.

Keywords: Agriculture, Wheat, Efficiency, Data Envelopment Analysis (DEA), Production

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Estimation kinds of efficiency and return to scale of sunflower's agriculturists of Khoy Township

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Abstract

Khoy is the greatest producer of sunflower in Iran. The main aim of this research is position's analyzing of kinds of efficiency (technical, allocation's, economic and scale) for sunflower's users in this city. This research is based on Data Envelopment Analysis (DEA), Statistics and data are filling out the 140 questionnaires in 2007_2008. Results show that average of technical, allocations, economical and scale Efficiencies of sunflower productions in area are, in order, 66, 54/7, 35/9 and 75/9. Inefficiency, at first, is related to allocation's inefficiency, and then by reason of different qualities of inputs like water and field. Results show that all producing inputs are less than optimum consumed amount and the most discrepancy of consumption is 886/7 in water savings and 385/76 in manure. According to the result, it is possible to increase agricultural production and decrease cost by using efficiency increasing programs without important changes in technology level and resource usage.

JEL Classification: D21, N5, H21, E23

Keywords: Efficiency, Data Envelopment Analysis (DEA), khoy, sunflower's

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Reginal disparity and grain productivity convergence in Iranian provinces

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Abstract

Productivity growth indicates significant differences between provinces that grow faster and whose lags behind others. The differences in the rates of productivity growth in various provinces may be the result of regional inequalities. Therefore, it is important to understand the long-run movement in the district level productivity differences and take effective measures (such as higher investment in infrastructure, research and development, etc). With regard to the importance of this topic, this study is finding out whether or not there has been a tendency towards convergence in grain productivity in the last two decades? Results indicate that on average during 1984 and 2003, some provinces had high productivity growth. In contrast, some provinces had experienced negative productivity growth in grain production. This conclusion is concerning the disparity between grain producer provinces in Iran. The convergence results show that some provinces with low initial levels of productivity have a potential to grow faster than provinces with high productivity and so are converging to the mean TFP. While the gap in productivity differences in some provinces is widening and productivity differences will not vanish in the long run.

Keywords: productivity, convergence, grain, Iran

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Determination of Optimum Size for Rice Farms in Guilan Province

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Abstract

The production unit size is one of the effective factors in optimum uses of inputs. Since optimum size is affected by the characters and economical conditions in each district, the studies for determining the optimum farm size should be done specially for each crop and each district. In this study tried to determine the optimum rice farm size in Guilan province which is one of the most talented district for rice in Iran applying Translog cost functions to data collected from 280 farmers in the studied district who were selected by two stage random sampling method. The results showed increasing return to scale for all districts and for each town. Also the optimum sizes are 2.17 ha for province, 2.2 ha for Rasht, Somee sara 2.26 ha, Talesh 2.01, Astaneh 1.73 ha and Rudsar 1.47 ha. In general, the optimum sizes are larger than present average sizes. Due to results, encouragement of farmers to form cooperatives and convert of small farm to cumulative farms are recommended.

Keywords: Optimum Size, Return to scale, Rice Farms, Translog cost function

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Survey on relationship between environmental pollution and economical growth by Using Panel Data: Case study of Carbon monoxide

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Abstract

This study shows the relationship between environmental pollution and economical growth by Kuznets hypothesis which has derived from provincial data during 1375 - 1385. Carbon monoxide pollution as environmental index and gross national product as economical index have been used. fix effects have been preferred to random effects based on F test for estimation of environmental kuznets curve by panel data. The vald test result through the model evaluation shows the cubic increasingly relation between two environmental and economical indexes. So this study has been done on five provinces: Esfahan, Tehran, Khorasan, Fars and Mazandaran during a decade, that shows increasing pollution due to economical growth. So it is necessary that the government do positive effort to reduction the pollution and effective decides should be provide for environment protection.

Keywords: environmental kuznets curve, Carbon monoxide, gross national product, fix effects by panel data.

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Study of market structure and marketing system of flowers and ornamental plants in Iran: a case study of Cut-Rose flower market in Esfahan

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Abstract

Producing of flowers and ornamental plants in Iran has some challenges and failure in the market structure and marketing of these products. In this study, we evaluated the different marketing channels of flowers and ornamental plants in the existing market structure according to economic criteria and the characteristics of market structure. Cut-Rose and Esfahan Province were selected as the production and product region samples, respectively. The results showed that producers share from consumer price and marketing efficiency is low. However, in this system due to high losses, there is low technical efficiency. Although, due to high retail price to farm price, price efficiency is high and therefore the total efficiency is also high. Thus, the share of other marketing factors from this high ratio is more than producers. The study of market structure showed that the goods are non-homogeneous and entrance requirement is hard and combined with uncertainty. Therefore, the marketing system of flowers and ornamental plants is inefficient and the market structure is a non-competitive structure. This condition that causes incomplete information in the market, will not allow the possibility of production planning for producers and as a result of excess supply or demand, the level of price volatility in wholesale is high. While the retail price has less volatility and reduced market price is not transferred to the consumer in many times. Therefore, the lowest and highest possible price is respectively received and paid by producers and consumers. In this regard, reform of flower market structure was proposed in Iran.

Keywords: Iran, Marketing, Market structure, Rose Flower.

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