The Analysis Management Skills of Farm between the Observer Experts of Wheat in Semnan Province

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A R T I C L E   I N F O

A B S T R A C T

This study was performed to the analysis management skills of farm between the observer experts of wheat in Semnan province. This investigation is applied in terms of objective, and is the type of causal- Connection; and is based on surveying Class investigation in terms of methodological. The statistical population of research will comprise of wheat Consultant Engineers in Semnan province that their number is (N =371). The research instrument was a questionnaire which its validity was confirmed on the basis of total opinions of professors. To determine face and content validity of the questionnaire, were used the opinions of experts and professors and advisors. To determine the validity of the research tools, were randomly distributed a number of 30 questioners among the abroad wheat observers of the sample and were calculated Cronbach's coefficient alpha (0.88) to the questionnaire. The results of the correlation showed that there is a significant relationship between the variables of productive skills, operational skills, planning and goal setting skills, marketing skills and communication skills with dependent variable capability of wheat Management Consultant Engineers in farm, the regression analysis also showed that planning skills and goal setting with variable production management and the variable operating skills explain about 64% of Changes in the dependent variable management capabilities of supervisory engineers farm in wheat Project , are estimated the 0.36 remaining of Changes in using variables that have not been addressed in this study.

INTRODUCTION

The farm management is a set of skills that will allow farmers to make informed decisions and be able to implement the changes that the operation moves to the expected goals. The farm management can be an efficient use of production factors in order to define the economic production of the farm. checking the status of agriculture in Iran shows that level of productivity is lower level in compared to developed countries and some countries in same level. Among the factors contributing to the growth of productivity, the central role of farmers in agricultural production arenas is irrefutable. Undoubtedly increase productivity in the agricultural sector needs more than anything to increase the knowledge and skills of individual beneficiaries that it entails the provision of training in this particular operation. Farm management is also part of the agricultural economies which examined the factors of production and analyze them [1].using the appropriate farm management practices by farmers in developing countries is as needs to recognize the researchers. New levels of farm management to agricultural supervisor experts and enables the farmers to use resources next to each other, executable implementation of innovations and increase the efficiency and effectiveness research in the level of field, [16] and agriculture sector with great challenges, such as the destruction of the resource base and natural, Failure in investment and not to compete with other economic sectors in profitability, the agricultural ravages products market, Inadequate staffing composition by age and education, failure in applied research, Inefficiency of support policies, Inequalities in contact of social facilities between producers and consumers of agricultural products, which is encountered with low Knowledge of technology; must see graduates of agriculture and natural resources what role play in the development of agriculture and the elimination of difficulties and

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obstacles [3]. the distinguishing feature of this scheme in Semnan province are organized the agricultural experts in consulting firms. This is in addition to the use of various potential together provided the possible suctions to better supervision on the implementation of tasks. Consulting firms in order to have legal personality alongside the monitoring process in province are carried out other activities that subsequently are effective in continuing their work. Evaluation project of field observers suggest this project is well received by farmers and almost one hundred percent of those surveyed individual in Semnan province are interested in continuing it. Due to the project of farm consultant is considered as the new branch, welcomed and accepted it considered as an introduction for admission which is very important from the perspective of innovation diffusion process. Farmers and beneficiaries have reached the level of awareness that know the prior knowledge to increase productivity is not enough and requires to experts and consultants. Beneficiaries have seen the importance of this issue with your own eyes in passing the implementation of design and therefore are keen to pursue it. Mentally in the society of beneficiaries there is positive look to the project and farmers are ready to work together to overcome the defects, Acceptance and institutionalization of the project largely depends on the elimination of defects and application in suggestions of peoples. Agriculture has led to the creation project jobs for graduates; maybe in the early stages, the created jobs cannot be called stable; however, based on the definition of work and employment, a significant number of agricultural experts have worked on the project of supervisors. The Supervisors

Project of farm cause to introduced the application of new technologies on employment. Mechanized cultivation process that has been met with resistance from farmers to be taken by some Supervisors, some innovations such as new irrigation systems, pesticides and how to use it, Use of the inversion various soil and ... Including technology and innovation is promoted and is used by engineers and farmers in recent years. Considering the importance of wheat production in Semnan as one of its strategic products and sustainable-farming management to increase productivity and realize the importance of farm management skills among experts as supervisor consultant of farmers in the production and this research has been done by using the effective strategies in this field, Shahrood in 1391 year of a research to assess the skills of farmers that surrounding soil management, concluded between the Skills of respondents with variable yield, there was a significant positive correlation in the surface under cultivation, the rate contacts of extension, accessing to information resources, , Social participation, technical knowledge and technologies of soil. Gaedi and Hosseini, Nia [2] have studied the training needs of beneficiaries in the field of economics and farm management. In this research, are considered the production and sales of agricultural products, financial management, employees of management, and strategic management field as the main aspects of management and farm economy. The results show that the introduction of national labor laws, Familiar with the transmission of experiences and new knowledge to people who working in the field, familiar with modern techniques of plant products; familiar with methods for monitoring the production process, quality control and maintain the marketability of products and Familiar with modern methods of packaging products which component of the first to fifth priority training needs of beneficiaries [2]. Coelli *et al.* achieved the role of farm management in increasing the product of Bangladeshi rice farmer's work. Regression analyzes in their study showed that farmers who are desirable in their farm management skills had the highest efficiency and age, education, and experience had no notable effects on performance [15]. Rolls., In a study of the Czech Republic came to the conclusion, In the case of farm management skills, Information about first marketing and information processing, selling products that has earned second place in opinion of consultants in the field and farmers before realizing the farm financial management problems, more seek to understand the field as a functional phenomenon, how is it now and how it should be in the future.

MATERIALS AND METHODS

This survey in terms of objective is applied, and the type of research is causal- connection and in terms of methodology are in class of survey-scrolling, that analysis the farm management skills among observer experts of wheat in Semnan Province, population of this research will comprise of Wheat Consultant Engineers in Semnan province that their number is (N =371) which operate in the 5 city of Semnan, Damghan, Shahrood, Garmsar. To determine the validity of the survey instrument, randomly distributed 30 questionnaires of wheat observers who are outside of a statically sample. After completing the questionnaire, responses will be collected and evaluated and finally through statistical software win / SPSS version 19. Cronbach's coefficient alpha (884/0) is calculated for the questionnaire.

RESULTS AND DISCUSSION

Based on the obtained data listed in Table 1 on the age of the studied statistical sample is 22 years about minimum age, 37 years about maximum age and the average age 26.17 years and the highest frequency of the 98 subjects in the age group are located in 25 to 27 years.

Table 1: Distribution of age groups studied samples (n=371).

age groups	Frequency	Percent	Percentage of total
22 to 24 years	64	17.25	17.25
25 to 27 years	98	26.42	43.67
28 to 30 years	82	22.11	65.77
31 to 33 years	69	18.59	84.36
34 and higher	58	15.64	100
-	371	100	-

Minimum: 22   Maximum: 37   Average: 26.17   standard deviation: 56/5

The results of Table 2 show that most of the statistical sample is in terms of gender for women (210), means 56.60 % of the respondents are women.

Table 2: summarizes the distribution of studied samples according to gender (n=371).

Variable	Items	Frequency	percent
Gender	Female	210	56.60
	male	161	43.40
	total	371	100

Based on the obtained data that contained in Table 3; The results of working experience about the studied statistical sample Indicates that at least 1 year of working experience and the greatest experience is 10 years and the average of work experience is 5.05 years.

Table 3: Distribution of work experience in the studied samples (n=371).

work experience	Frequency	Percent	Percentage of total
1 to 2 years	32	8.62	8.62
3 to 4 years	69	18.60	27.33
5 to 6 years	111	29.92	57.14
7 to 8 years	89	23.99	81.13
9 and higher	70	18.87	100
total	371	100	-

Min: 1   Max: 10   Average: 5.08   standard deviation: 03/1

Based on the obtained data that contained in Table 4; The results of level education in the studied statistical sample Indicates that the majority of studied samples are with a frequency of 253 individuals in level of BA.

Table 4: Distribution of studied samples according to educational level.

Variable	Items	Frequency	percent
Gender	BA	253	68.20
	MA	110	29.65
	Ph.D.	8	2.15
	total	371	100

The farm management capabilities:

In order to assess the ability of farm management, was introduced 27 Likert items with a range of five options (1: Very Low 2: Low 3: average 4: High 5: very high), The respondents expressed their opinion about each of the items. The lowest score for each case, 1in order to the very low farm management capabilities and the highest score for each case, 5 is considered very high level of farm management capabilities and due to the considering of 27 items in assess the ability of farm management, The score range in order to measure the ability of farm management is 27 to 135, this range is divided into five equal parts, the majority of respondents is titled as 120 individuals (32.35%), that the ability management of their farm are in high level.

Table 5: Distribution of studied samples in terms management of farm capabilities (n=371).

Spectrum Estimation	Frequency	Percent	Percentage of total
very Low	32	8.63	8.63
Low	56	15.09	23.72
average	89	23.99	47.71
High	120	32.35	80.06
very high	74	19.94	100
	371	100	

To investigate the correlation between the independent variables and the dependent variable was analyzed of Pearson's correlation coefficient that results are presented below. Calculating the Pearson correlation coefficient between the variables of production management skills, Operational skills, variable marketing skills and observer's management of wheat field abilities suggest that approve and reject the null hypothesis between

these variables, and the significant relationship in the 99 percent confidence level (Table 6). Calculating the Pearson correlation coefficient between the variables of marketing skills, Communication skills and ability to manage variable observer's wheat field indicate that approve and reject the null hypothesis between two variables, and statistically significant in 95% level confidence (Table 6).

Table 6: variables correlated with the dependent variable.

Independent variable	Pearson correlation coefficients	Significant level
Production Management	0.410**	0.000
Operational skills	0.659**	0.007
Marketing skills	0.551	0.011
Planning and goal setting skills	0.766**	0.002
Communication skills	0.254**	0.014

Significant levels:
$p \leq 0/05$: * $p \leq 0/01$: **

Multiple Regression Analysis:

In this stage to measure the mass of the independent variables on the dependent variable used of Stepwise multiple regression method (Stepwise). Stepwise method is approach in which the most powerful variables one by one into the regression equation and this continues until the error is in 5% significance test. One of the conditions to use of regression analysis is the existence of a scale length variable. Therefore 3 variables that is associated with the dependent variable into the regression analysis.

Table 7: Shows a summary of the regression model.

step	Variables	R	R square	Adj R square	Std	F calculated	Significant level F	Watson camera
1	Production Management	0.804	0.644	0.571	3.431	54.748**	0.000	
2	Operational skills	0.824	0.678	0.610	52.436**	52.436**	0.000	2.3
3	Planning and goal setting skills	0.837	0.701	0.642	51.689**	51.689**	0.001	

In this study after calculated the correlation coefficients between the research variables by using the Pearson's correlation coefficient, all variables that have a significant correlation with the dependent variable management of field capabilities, was entered into the Stepwise multiple regression equation. Regression model was applied to three steps. In this research, in regard to writing and use of regression analysis was used of compliance with the assumptions of linear regression. This means that to assess the independence of each other on errors (lack of correlation between errors) was used to test the watson camera. is obtained the value and the camera - Watson equivalent to 2.3 and considering that the value of this parameter is between 1.5 to 2.5 ;therefore, will be accepted the assumption of independence of our errors (Table 7). Correlation test between production management skills and ability to manage observers of wheat field and there is significant relationship between production management skills and ability to management wheat of observer farm. The research findings are consistent with the results of current research and Medical Rad, Yagubi., *et al* [5], Sakai [12]. Correlation test between functional skills and management abilities observers of wheat field and there is significant relationship between production management skills and ability to the management wheat of observer farm that is consistent with the research results of Saddigi [6], Al-Rimavi [9], Raychirt, Chiypta [10]. Correlation test between marketing skills and management abilities observers of wheat field and there is significant relationship between production management skills and ability to the management wheat of observer farm that is consistent with the research results of Karami and Hayati, Shroder *et al*, Bolhuj *et al* [8]. Correlation test between planning and goal setting skills and management wheat of observer farm there is significant relationship between production management skills and ability to the management wheat of observer farm that is consistent with the research results of Karami and Hayati, Reychert. Correlation test between communication skills and management wheat of observer farm there is significant relationship between production management skills and ability to the management wheat of observer farm that is consistent with the research results of Al-Rimavi *et al* [9,11].

Suggestions:

According to the significant of the relationship between production management skills and ability to the management wheat of observer farm that to be held before applying the crop prospects in this field for their classes and also the practical visits takes place on the agenda of the fields, Observers to learn these skills as Practical method, according to the significance of the relationship between skills and operational skills and ability to the management wheat of observer farm is suggested that due to the Increased effectiveness of the supervisory activities of engineers more familiar with operational skills, recommended the practical training

courses, Training classes and seminars with the participation of experts convened to improve the knowledge and skills of engineers to provided the supervisors in the field. According to the significance of the relationship between skills and marketing skills and ability to the management wheat of observer farm suggest that supervisors does not start in the field of counseling records of production and yield and profitability analysis, but all of the accounting and used the evaluation of available agricultural resources and concerned the production together with marketing and supervisors need to create a simple registration system, But are the effectiveness of their efforts in the field and in particular, how to organize the data of farm management, production, marketing And the use of financial management simple tools to operate, and train. According to the significance of the relationship between skills and goal setting skills, planning and management capabilities wheat of observers field and also as regards to the marketing skills and determine the object is too low in the majority opinion of observers ;Since the successful marketing of farm management skills and determine the object of Cultivation should be done skillfully, Therefore an effective approach in this area And the prepare appropriate strategies to enhance awareness and the technical skills in the process could increase in production and increase the incentive of farmers has effective to develop a Cultivation. Due to the significance of the relationship between communication skills and ability to the management wheat of observer farm is suggested That supervisors of participatory approach school farm use more in training of farmer-to-farmer exchange public which are employed in many developing countries.

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