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ANALYSIS OF FARM MANAGEMENT SKILLS AT INDUSTRIAL CATTLE FARMS IN BEHBAHAN TOWNSHIP

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ABSTRACT

The purpose of the study was evaluating farm management skills at industrial cattle farms of Behbahan Township. Statistical population of the study consisted of all industrial cattle farm managers who had been engaged in cattle farming in the year of 2014. According to Morgan's table, 87 industrial livestock farmers were chosen as the statistical sample. Simple random sampling was used as sampling method. The method of research was descriptive-correlative. Questionnaires were used as the study tools whose validity and reliability were measured and verified by using a panel of experts and using Cronbach's alpha coefficient, respectively. According to the results obtained, levels of farm management skills among industrial livestock farm managers were evaluated and finally some suggestions were presented for improving levels of farm management skills.

Keywords: *Skill, Farm Management, Industrial Cattle Ranch, Behbahan*

INTRODUCTION

Studies indicated that the distance of supply and demand is very high to provide the least needed animal protein. FAO had been recommended that the minimum protein which an individual must consume in a day is 65 g which from this 36g, that is 40% must provide through animal resources (Yusuf and Maloma, 2007). The consumption rate of animal protein is 22g/day in Iran and this rate is 30% less than the recommended rate by FAO. In Iran, the agriculture sector has a special position in production and developmental policies to exit from the dependence to the mono-product economy and achieve a new multidimensional capability (Ommani and Chizari, 2008). Farmers, as production managers, cannot accomplish a successful economical activity without the knowledge and acceptance of new methods and without having a logical management. Because the exploitation unit's management is mainly traditional and noncommercial, these units are facing problems such as the lack of ideal exploitation of different production factors. Incorrect exploitation is mostly related to the weakness of production factors management and lowness of farmer awareness, information, and technical skills (Yaghobi *et al.*, 2009). Farm operators need to management skills to take correct decisions. These skills enable them to manage their farms, effectively facing with the changes in agribusiness environment and remain in the high competition of trade environment (AL-Rimawi *et al.*, 2006). These managerial skills help them to perform correct selection due to financial levels, workforce, land resources and risk escaping. These skills help the farmers for access to income possible levels about what thing must be product, in which part of farm, by what method when and how much, take informed decision (AL- Rimawi *et al.*, 2006 and 2004). The purpose of the present study is to evaluate farm management skills at industrial cattle farms of Behbahan Township. Accordingly, the specific objectives of this study are as follows:

1. Determining level of farm management skills at industrial cattle farms of Behbahan Township.
2. To determine the relationship between personal characteristics and the level of farm management skills at industrial cattle farms of Behbahan Township.
3. To determine the relationship between social characteristics and the level of farm management skills at industrial cattle farms of Behbahan Township.
4. To determine the relationship between economic characteristics and the level of farm management skills at industrial cattle farms of Behbahan Township.
5. To determine the relationship between promotional features and the level of farm management skills at industrial cattle farms of Behbahan Township.

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RESULTS AND DISCUSSION

Results showed that 93.10 percent of the farmers with a frequency of 81 people were men and 6.89% with a frequency of 6 people were women. In addition, 73 people were married. Findings indicated that from 87 cattle farm managers, in terms of age group, 8.04, 44.82, 26.27 and 9.32 percent with frequencies of 7, 39, 31 and 11 people were in the age groups of 21-30, 31-40, 41-50, and 51-60, respectively.

In terms of experience in cattle farming, results indicated that 17.24, 39.08, 35.63 and 8.04 percent with frequencies of 15, 34, 31 and 7 people were in the groups of: fewer than 10, 11-20, 21-30 and higher years of experience, respectively. According to the results obtained in the present study, in terms of level of education, 45.97 and 54.01 percent with frequencies of 40 and 47 people had diploma and lower and BSc and upper respectively.

Table 1: Distribution of individuals in term of personal characteristics

Variables	Frequency	Percent
Gender		
male	6	6.89
female	81	93.10
Marital status		
Single	14	16.1
Married	73	83.9
Age		
21-30	7	8.04
31-40	39	44.82
41-50	31	26/27
51-60	11	9.32
Level of Education		
Diploma and lower	40	45.97
BSc and upper	47	54.01
Experience		
Under 10	15	17.24
11-20	34	39.08
21-30	31	35.63
Higher	7	8.04
Family members		
1-2	29	33.33
3-4	36	41.37
5-6	17	19.54
7-8	5	5.7

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The results of table 2 indicated that respondents believed that the average of their ability rate in the skills of planning and goal setting, production skills, work skills, accountancy and financial skills, decision making skills, marketing skills, resource mobility skills, information seeking skills, sustainability skills, risk orientation skills, technical skills were 3.75 (SD=0.56), 3.21 (SD= 0.61), 3.49 (SD=0.65), 3.75 (SD=0.72), 3.45 (SD=0.66), 3.17 (SD=0.64), 3.35 (SD=0.88), 2.90 (SD=0.82), 4.45 (SD=0.48), 4.20 (SD=0.43), respectively

Table 2: Level of farm management

Items	Number of item	Mean	Sd
planning and goal setting skills	10	3.75	0.56
Production skills	6	3.21	0.61
Work skills	8	3.49	0.65
accountancy and financial management skills	14	3.64	0.69
Decision making skills	10	3.75	0.72
Marketing skills	6	3.45	0.66
Resource mobility skills	3	3.17	0.64
Information seeking skills	13	3.35	0.88
Sustainability skills	5	2.90	0.82
Risk orientation skills	14	4.54	0.48
Technical skills	13	4.20	0.43

Table 3: Relationship between the study s variables

First variables	Second variable	Coefficient of correlation	Level of significance
Age	Farm management	0.48**	0.001
Level of Education		0.28**	0.003
Family members		0.082	0.65
Attitude		0.20	0.4
Experience		0.72**	0.001
Non- farm income		0.08	0.9
Debt level		0.12	0.75
Social participation		0.27**	0.001
Social Welfare		0.09	0.96
Social Status		0.17*	0.044
Access to information		0.54**	0/001
Number of animals		0.48**	0.001
Total Production		0.57*	0.04
Total income		0.69**	0.001
Participation in extension courses		0.71**	0.001

** $P \leq 0.01$ * $0.01 < P < 0.05$

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In order to evaluate the relationship among study variables, correlation coefficients and their level of significance were calculated. In table (3), the variables, coefficients of correlation and level of significance are showed. Based on the results, there is a positive and significant relationship at a 99 percent level among variables of age, education level, experience, access to information sources, number of cattle, total income and the level of farm management skills. There is also a positive and significant relationship at a 95 percent level between social status, total production and the level of farm management skills.

Results of Regression Analysis

According to the result obtained from regression analysis, six variables of participation in extension courses, age, experience, social participation, total income and access to information sources remained in the equation which, interactively, explained 74 percent of the variance of dependent variable (farm management skills).

For comparing the effects of six independent variables in the model, Beta coefficients were used. Results revealed that independent variable of total income had the most effect on the farm management skills. The regression equation is given in table 4.

Table 4: Finding of a stepwise multiple regression analysis in the livestock industry

	Forecasting variable	Non-standardized		Standardized		Calculated t	Level of significance
		Input coefficient	Standard error	β			
	Constant	114.127	161.092			0.382	0.003
1	Participation in extension courses	6.571	3.027	0.307		2.318	0.001
2	Age	4.681	1.348	0.314		2.901	0.002
3	Experience	3.125	2.185	0.185		1.249	0.001
4	Social participation	5.154	2.013	0.39		2.681	0.001
5	Total income	12.229	2.481	1.124		4.789	0.001
6	Access to information sources	3.48	1.49	0.47		4.58	0.001

$$R=0.87 \quad R^2=0.74 \quad R^2_{adj}=0.72 \quad F=151.34 \quad Sig F=0.001$$

$$Y=114.127+6.57X_1+4.68X_2+3.12X_3+5.15X_4+12.22X_5+3.48X_6$$

Conclusion

Based on the results, there is a positive and significant relationship at a 99 percent level among variables of age, education level, experience, access to information sources, number of cattle, total income and the level of farm management skills. There is also a positive and significant relationship at a 95 percent level between social status, total production and the level of farm management skills.

According to the result obtained from regression analysis, six variables of participation in extension courses, age, experience, social participation, total income and access to information sources remained in

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the equation model. Interactively, these variables explained 74 percent of the variance of dependent variable (farm management skills). For comparing the effects of six independent variables in the model, Beta coefficients were used. Results revealed that independent variable of total income had the most effect on the farm management skills.

Based on the results recommendations were:

Enhance the access level of cattle farm managers to updated and high quality information sources through a systematic and continuous plan and provide the most important information needs of cattle farms.

Generally, development of agricultural sector and improvement of productivity of production resources in this sector requires continuous enhancement of skill and knowledge of managers at industrial and traditional farming units and livestock producers for obtaining economic and commercial production.

Reflecting the problems and difficulties in the farming unit to the center of extension services.

Transfer of technical information obtained from center of extension and research services to the farmers.

Facilitating and accelerating the transfer of research findings to livestock farms.

Strengthening production cooperatives of cattlemen and investment to absorb more cattlemen in the respective cooperatives can be an effective solution for improving risk management status in cattle farms which leads to higher production.

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