

# Analyzing Farm Management Skills in Poultry Production Enterprises in Iran

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**Abstract:** The main purpose of this study was to analyze managerial skills of poultry production operators in *Soumeh Sara* Township in Guilan province, Iran, which used a descriptive-analytical design. The population of this study consisted of whole industrial poultry production enterprises of *Soumeh Sara* Township (N=117) and out of them, 50 operators had been selected as statistical sample through simple random sampling. The instrument used to achieve objectives of the study was a questionnaire by reliability 0.92. Findings reveal that among the studied management skills marketing skill had been placed the least ranking means. In addition, poultry production operators had the best ability in technical skills. The average of ability rate of poultry production operators in technical area was 4.08 which indicated the high to very high ability rate of respondents in this area. According to the results, it is necessary to improve the marketing and farm management skills of farm operators through extension and participation in training activities.

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## 1. Introduction

Studies indicate that the food of the most people of the world (especially, developing countries) is suffering from protein deficiency and since protein, especially animal protein, play important role in human nutrition, its quality and quantity must reach to ideal extent (Nikougoftar, 2003). 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 Malomo, 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 the recent years, hen meat had been applied to feed human and provides the needed protein, extensively. Poultry production, because of speed growth, nutrition facility, using closed space, lower density and conversion coefficient than the other portion products and also having the needed material for human body, is enjoying certain interest. But, because of no observance of correct management principles and technical standards in poultry production and breeding, remarkable damage had been done on producers in the first and then on communication and national economy (Dashti and yezdani, 1996). Generally, this branch of husbandry had been not reach to development target, because of

reasons such as low production productivity, weakness in management, inefficiency of enterprises and practicing of traditional production methods (Mirakzadeh, et al, 2010).

Today, this industry is against the severe economic practices of governments and the most rigors from governments are certain attention to management preparations in poultry enterprises in order to increase the efficiency (Oknkow & Akubou, 2001). The reason of this is that management is the hidden factor of the production and will have increasing effect. In addition to three factors of labor force, capital and land, management is introduced as the fourth factor of production which have important role in the three first factors. What is important theoretically is that in each production enterprise, due to being quality of management enterprises, it must turn to quantity for using some indexes until it can use in production function (Hamidi, 2005). Therefore, the managers of agriculture production enterprises and farmers are considered as the most efficient agent to control efficiency and productivity of enterprise. So, assessment of their performance and efficiency and also their role in realizing farm management goals play important role, So that, Amini, et al. (2007) had been introduced managers capacity and proficiency as one of the important inter organizational component in success of poultry cooperation's. In order for farm manager to act with the maximum efficiency to reach to an end, they need

one set of management skills. 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 main purpose of this study was to analyze managerial skills of poultry production operators in Soumeh Sara Township in Guilan province, Iran.

## 2. Material and Methods

This study was conducted in *Soumeh Sara* Township, Guilan province, Iran. General approach of this research is quantity. With regard to the research problem which is try to study the level of managerial skills in poultry production enterprises, it performed based on survey strategy and it is enjoying of descriptive-analytical method. Statistical population of this research consisted of whole industrial poultry production enterprises (operators) of Soumeh Sara (N=117) and out of them, 50 operators selected as statistical sample. The main instrument for data collection was a questionnaire including specification and managerial questions about poultry production enterprises and individual/professional characteristic. To ensure its content and face validity, the research instrument was reviewed several times by the research group (faculty member of Animal Husbandry Department at Islamic Azad University, Rasht Branch and staffs of Guilan Agricultural Organization) and then implemented in a pilot test to measure its reliability. Questionnaire reliability was estimated by calculating Cronbach's alpha. Reliability of the overall instrument was estimated at 0.92. It meant that index had high reliability. The data were collected between April and July 2010. These questionnaires delivered to *Soumeh Sara* poultry production operators and data collected through structured interview with poultry operators. In order to measure the perspective of poultry production operators about their ability in farm management skills, 58 closed-end questions in nine skills area (planning and determine the goal, accountancy and financial management, rational marketing, seeking information, resource mobilization, risk orientation, communicative and technical) used. In order to measure respondents perspective to ability rate in each of the area in farm management, six-point scale had been used which had been ranked from 0=none, 1=very low, 2=low, 3=moderate, 4=high to 5=very high. In order to analyze data, descriptive statistic (mean and standard

deviation) and inferential methods (Friedman test) used.

## 3. Results and Discussion

### *Planning and determining the goal*

The results (table 1) indicated that respondents believed that the average of their ability rate in the skills of this area in the farm management was 3.76 (SD=0.45) which indicating the moderate to high level. With regard to investigate the skills, it identified that respondents had the highest and lowest ability in predicting the required inputs rate over a production period (M=3.94, SD=0.87), and predicating and estimate the income from production over a production period (M=3.48, SD=0.76), respectively. The most important reason for low ability rate of respondents' in predicting and estimate the income from production is lacking stabilization of hen price in market and price fluctuation, and according this, producers are enjoying low ability to predict their income during one production period.

Table 1, setting priority for respondents' viewpoint on the ability of planning and goal setting skills

Rank	Planning and goal setting skills	M	SD
1	Predicting the required inputs rate over a production period	3.94	0.87
2	Ability to develop production program and to identify production targets in the short and long term	3.92	0.66
3	Having a program for hard and difficult conditions and following it	3.80	0.78
4	Predicting and estimating production costs over a production period	3.72	0.70
5	Predicting and estimating production rates over a production period	3.68	0.68
6	Predicating and estimating the income from production over a production period	3.48	0.76
	Mean	3.76	0.45

### *Accountancy and financial management skills*

Date analyzing indicated that the mean rate of respondents ability in this area of farm management is 3.81 (SD= 0.61) which indicating the moderate to high level. The ability to record carried out production in poultry production enterprise (M=4.24) is the first priority of managers ability in this area. Also, the ability to record used inputs in poultry production enterprise (M=4.22) and the ability to record and calculate initial capital rate of poultry production enterprise (M=4.16) allocated the second and third priority of managers ability (table2).

The data of this table is confirm with table 1, because the ability to record used inputs rate in poultry production enterprise which consider as the high ability, is the first ability in the table 1, too. Respondents are not in well situation in the buy ability of general needed requirements to enjoying of

reduction price ( $M=3.34$ ), relatively. One of the effective factors in this problem is liquidity deficiency and also lacking ability to effective use from various financial and credit resources.

Table 2, setting priority for respondents' viewpoint on the ability of accountancy and financial management skills

Rank	Accountancy and financial management skills	M	SD
1	Ability to record conducted production in poultry production enterprise	4.24	0.92
2	Ability to record consumed inputs in poultry production enterprise	4.22	0.93
3	Ability to record and calculate the amount of initial capital in poultry production enterprise	4.16	0.82
4	Ability to record and calculation of profit and loss in poultry production enterprise	4.08	0.95
5	Ability to create a good and effective financial accounting system	3.72	0.97
6	Following-up continuing education to improve financial management skills	3.43	0.94
7	Ability to effectively use of financial and credit from various sources	3.35	0.95
8	Ability to purchase needed inputs to enjoy discount prices	3.34	1.00
	Mean	3.81	0.61

#### Marketing skills

The important thing after production of each product is, reaching that to consumers. Marketing misled many farmers. Sometimes, farmers leave the marketing and focuses on production stage which they better understand in, and this problem is dangerous. Successful farmers in the present time and future not only must manage the production but also marketing and financial affairs (Yaaghubi et al., 2009). Also, Maru (2003) stated that those farmers who recognize the market opportunity are enjoying more chance to success than the individual who are not recognize this opportunities. Table 3 indicate that the ability to choose the best time to sell product ( $M=3.50$ ,  $SD=1.01$ ) is the highest ability in this area in respondents point of view. Data analyzing indicated that the average rate of respondents ability in this area of farm management is 2.68 ( $SD=0.62$ ) which impaling the low to moderate ability level.

#### Information skills

In order to combat to the changes of trade environment in agriculture, farmers had been found that information management is the confident way to survival (Yaaghubi. et al, 2009).

Also, Pezeshki Rad and Zamani (2005) known the using of information as the most important property of information age and they consider the obtaining of information as the most important challenges of this age. The ability to find new and

better methods to do things ( $M=3.61$ ,  $SD=0.91$ ) and the ability to collect the information about modern technologies of production ( $M=3.52$ ,  $SD=1.03$ ) had been allocated the two first priority of ability in this area, respectively.

The findings of table 4, indicated the respondents ability in this area of farm management in moderate to high level ( $M=3.17$ ,  $SD=0.88$ ). The ability to collect information about government policy in market, introduced as the least ability rate from operators of poultry enterprises. Maybe, one of the effective factors on this problem is permanently changing policies of government in the market and lacking stabilization of these policies.

Table 3, setting priority for respondents' viewpoint on the ability of marketing management skills

Rank	Marketing management skills	M	SD
1	Ability to choose the best time to sell the product	3.50	1.01
2	Familiarity with modern style of packaging products	3.30	0.88
3	Ability to analyze demand, supply and price of chicken	3.04	1.35
4	Familiarity with the role of cooperatives in direct sales of Products	2.53	1.24
5	Ability to analyze government policy on poultry markets	2.45	1.17
6	Ability to supply product directly to consumers (rather than selling to slaughterhouses)	1.24	1.20
	Mean	2.68	0.62

Table 4, setting priority for respondents' viewpoint on the ability of information seeking of management skills

Rank	Information Seeking skills	M	SD
1	Ability to find for new and better way to do things	3.61	0.91
2	Ability to collect information about new production technologies	3.52	1.03
3	Ability to collect information on inputs prices and market	3.06	1.42
4	Ability to collect information about government policies on the market	2.49	1.43
	Mean	3.17	0.88

#### Decision-making skills

Decision-making is the most important task of managers irrespective of their place and also the managers and supervisors of poultry production units are not excepted. Sometimes, taking correct and also on-time decision cause to continue living of an organization. The results (table 5) indicated that managers' ability in this area is in moderate to high extent ( $M=3.67$ ,  $SD=0.66$ ). In order to measure this skill, six statements had been used which among

these, operators consider their ability to take correct decision on technologies as more strengthen than the other properties (M=3.86, SD=0.91). The ability to effective use from production advisors (economical, veterinary, nutrition etc) (M=3.74, SD=0.94) was the second property which poultry production enterprises' manager found their ability in it. The ability to rapid analyzing of situations which they not faced with them up to now (M=3.50, SD=0.84), was the least reported properties from respondents, relatively.

Table 5, setting priority for respondents' viewpoint on the ability of decision-making of management skills

Rank	Decision-making skills	M	SD
1	Ability to make a good decision about technologies to use or be accepted	3.86	0.91
2	Ability to effective use from production advisors (economical, veterinary, nutrition etc)	3.74	0.94
3	Ability to use best management operations poultry production units	3.72	0.83
4	Ability to take right decisions about time or acceptance of new technologies	3.69	0.83
5	Ability to quickly identify and correct manufacturing problems and the principles to solve the problems	3.54	0.91
6	Ability to rapid analyzing of situations which they not faced with them up to now	3.50	0.84
	Mean	3.67	0.66

#### Resource mobilization skills

The ability to use with the least cost to obtain maximum efficiency had been stated as the index of productivity with the highest ability (M=3.84, SD=0.76) in this area of skills from poultry production units owners. Generally, the ability in this area is in moderate to high extent (M=3.71, SD=0.63).

Table 6, setting priority for respondents' viewpoint on the ability of resource of mobilization management skills

Rank	Resource mobilization skills	M	SD
1	Ability to use inputs with minimal cost to get the maximum efficiency	3.84	0.76
2	Ability to choose technologies and methods that make efficient use of resources	3.66	0.89
3	Ability to complete activities in the best possible time, shortest cycle time and maximum performance	3.63	0.81
	Mean	3.71	0.63

#### Risk oriented skills

Agriculture is consider as the most adventure job and in turn the farmers and owners of agribusiness units (including poultry production) have high risk in their job, so. It is necessary to enjoy from high capacity and ability in facing with crisis and high danger condition. The results of data analyzing (table 7) indicate that as many other studied area of farm management skills, respondents ability in this area is in the moderate to high talent (M=3.47, SD=0.61). The first ability of respondents in this area have attitude nature, so that the ability to understand this fact that sometimes risky ability is necessary devoted the highest average to it self (M=3.80, SD=0.73).

The ability to effective management of financial and production risk (M=3.64, SD=0.83) and the ability to predict and collecting some strategies to facing with production threading risks (M=3.41, SD=1.04) devoted the second and third ability in this area, respectively.

Table 7, setting priority for respondents' viewpoint on the ability of risk oriented of management skills

Rank	Risk oriented skills	M	SD
1	Ability to understand the fact that risk is sometimes necessary	3.80	0.73
2	Ability to effective management of financial and production risks	3.64	0.83
3	Ability to predict and develop strategies for facing the dangers condition	3.41	1.04
4	Ability to create savings, and financial support when it is necessary	3.32	0.96
5	Proper use of agricultural insurance	3.20	1.20
	Mean	3.47	0.61

#### Communicative skills

One of the three major skills for every manager is the ability to establish ideal and effective communication. The results of data analyzing indicated that the average of respondents' ability in this area is 3.82 (SD=0.55) (table8) which indicating the ability rate in the moderate to high extent. Among the investigated characteristics in this area, the ability to establish good, clear, exact and honest communication with others (M=4.00, SD=0.72), the ability to transfer the experiences and knowledge to new people working in poultry production enterprises (M=3.98, SD=0.74) and the ability to consider others opinion and perspective in management of unit (M=3.88, SD=0.72) is indicating the highest rate of stated ability among the respondents, respectively. In the other hand, the ability to empower others for doing affair (M=3.62, SD=0.92) is the least stated ability rate in this area which indicate the following of poultry production units operators from traditional

management style and lacking participative management moral among the respondents (table 8). Also, the ability to create positive and good relationship with buyers and sellers had been located in tenth place of abilities which also this point indicate the lacking attention to customer-oriented and its importance in human relationship management in poultry production enterprises.

#### Technical skills

The average of ability rate of poultry production operators in this area was 4.08 (SD=0.57) which indicated the high to very high ability rate of respondents in this area. Most of investigated indexes in this area were in good and very good situation but among these, the ability to control density (M=4.32, SD=0.62), ability to manage watering system (M=4.22, SD=0.84) and the ability to manage feeding system (M=4.22, SD=0.86) are enjoying the best situation. The respondents stated their ability in feeding formulation (M=3.83, SD=0.92) and familiarity rate with work and insurance rule (M=3.72, SD=0.78) in the lower extent than the other indexes of this area (table 9).

The investigation of respondents perspective about ability in farm management skills through Friedman test ( $\chi^2=189.044$ ,  $P<0.001$ ) indicated that technical skills with the mean of 7.01 and marketing skills with mean of 1.61 have the highest and least ability in farm management, respectively (table 10).

Table 8, setting priority for respondents' viewpoint on the ability of communicative management skills

Rank	Communicative skills	M	SD
1	Ability to establish good, clear, exact and honest communication with others	4.00	0.72
2	Experience and ability to transfer knowledge to new people working in poultry production enterprises	3.98	0.74
3	Ability to consider others opinion and perspective in management of unit	3.88	0.72
4	Ability to communicate with others about the problems to achieve the desired result and the finding ways to solve them	3.86	0.67
5	Ability to assist employees to improve their skills and abilities	3.82	0.77
6	Ability to create fit between job requirements and skills of their employees	3.82	0.82
7	Ability to listen to their comments and suggestions to improve the performance	3.80	0.86
8	Ability to define specific tasks for each employee	3.80	1.00
9	Ability to avoid hegemony	3.74	0.94
10	Ability to create positive and good relationship with buyers and sellers	3.69	0.94
11	Ability to give authority to others for doing works	3.62	0.92
	Mean	3.82	0.55

Table 9, setting priority for respondents' viewpoint on the ability of technical management skills

Rank	Technical skills	M	SD
1	Ability to control density	4.32	0.62
2	Ability to manage watering system	4.22	0.84
3	Ability to manage feeding system	4.22	0.86
4	Ability to prepare hall before entering the chicken	4.16	0.79
5	Ability to manage and develop one-day chicks	4.14	0.81
6	Ability to manage the physical environment (air, adjust the heat, light and humidity)	4.12	0.85
7	Ability to control the sanitary conditions and health measures and preventive actions necessary	4.04	0.75
8	Ability of feeding formulation	3.83	0.92
9	familiarity rate with work and insurance rule	3.72	0.78
	Mean	4.08	0.57

Table 10, study of differences between mean of management skills in poultry production enterprises from the viewpoint of the operators

Rank	Management Skills	Rank Mean
1	Technical	7.01
2	Accountancy and financial management	6.06
3	Communicative	6.02
4	Planning and determining the goal	5.88
5	Resource mobilization	5.50
6	Decision-making	5.32
7	Risk oriented	4.28
8	Informative	3.32
9	Marketing	1.61

#### 4. Conclusion

Currently weak management of production factors and economic inefficiency of production enterprises is one of the agricultural problems. Incorrect using is related to low of information and technical skills of farmers. So, paying attention to farm management and recognition its restricting factors and providing suitable executive ways, will be a good way to change in production of agricultural products and ideal use of production factors (Yaaghubi, et al., 2009). Farms operators need to management skills to take correct decisions. These skills enable them to manage their profession, effectively facing with the changes in agribusiness environment and remain in the high competition of trade environment (AL-Rimawi et al., 2006).

The results of this research indicate that among the studied management skills marketing skill had been placed the least ranking means. Until productive crops not reach to sell point and the customers have not satisfaction, production process is not complete. In the marketing skills area, the property of direct supply of product to consumers had been placed in the lowest rate of ability. In this respect, we can refer to middle-man in the poultry

market which in one hand increase the poultry price fluctuation and, at the other hand, can play role to prevent direct communication between sellers and consumers. Establishing direct delivery centers can play key role to solve this problem. Therefore, the major part of solution of this problem is to collect executive program to set out this centers and at the other hand, holding extension courses with the title of attention and given importance to customer opinion and attract the customers satisfaction can be as a training strategy for operators of poultry production enterprises. Also, low level of analyzing ability of government policy in market area is one of the properties which had been stated by respondents. Unfortunately, the most important reason of this is lacking the clear policy form government and also corrects and on-time decision in poultry market. Also, the fluctuation price of in the world market raises this problem.

After marketing skills, information skills are in the lowest average. Generally, information role of managers is one of the three conceptual roles for them, which unfortunately, the results of this research indicating the lowering of ability level of Soume Sara poultry production owners in this area. Also, in this area, as marketing area, respondents found themselves less strength in collection information about government policies in market than the other properties which support the previous results.

According to the results, it is necessary to improve the marketing and farm management skills of farm operators through extension and participation in training activities (AL-Rimawi et al., 2004). Training role to improve management skills of farmers is considered as an important task to public extension service (Mattila et al., 2007).

Advisors through extension education programs can improve the management ability of farm operators, remarkably. They can help the farmers in taking better and informative decision, to acquire skills in analyzing their decision, evaluation the marketing, identify the trade opportunities and scheduling, quality and quantity of products toward the satisfaction of target market in intensive trade environment (AL-Rimawi et al., 2004 and 2006).

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