

## Assessing the Impact of Management Skills on the Productivity of Lying Farms in Isfahan Province

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### Extended Abstract

#### 1. INTRODUCTION

The poultry industry is one of the sub-agricultural sectors that is able to attract capital and apply updated world technology to earn a special place in production and employment in the country. For this purpose it needs to adhere to modern management methods and has consistency with the economic and management principles. Given the importance of this industry, especially in meat supplies needed by the consumer society, the aim of this study was to evaluate the impact of management skills on the productivity of lying farms in Isfahan province.

#### 2. THEORETICAL FRAMEWORK

In this study, after formulating goals, Core concepts and interfaces were defined and the space is laid out. The independent variable (Management factors), in the method of Indexing, were assessed in three domains of human skills, conceptual skills and technical skills. Factor analysis was used to build each index. Then the components were entered into the equation and each weight was calculated. Each variable was then multiplied by the weight, the sum was divided by the sum of weighted variables and the index is calculated from the value. There are many ways to measure productivity. In this study Fisher index is used to measure the efficiency of poultry. The Fisher ideal index is calculated from the geometric mean of Laspyrz and sprayers indices.

#### 3. METHODOLOGY

This article is derived from the field study that has been done with the aim of evaluate the effect of management factors on the productivity of laying flocks in Isfahan province. The necessary information to determine the objectives and explain the theoretical framework was available through libraries and archives. The process of data collection was conducted with the help of a

questionnaire which has been desinged for the purpose of this study.

the required data for this study was gathered from a survey of 70 lying farmers in Isfahan province through face-to-face interviews, based on a structured questionnaire. Validity and reliability of measurement instruments using Alpha chronbach and K.M.O respectively, were 0.712 and 0.803. Managerial dimension evaluated in a three-category typology of skills: technical, human, and conceptual. For this purpose, factor analysis was used as a structure detection method for creating indexes. Furthermore, productivity as a dependent variable was measured by using the Fisher productivity index. Fisher index results show that the efficiency of poultry in total is between 1.0721 and 0.9642 and the average of it is 0.993417.

#### 4. DISCUSSION

Results of descriptive statistics revealed the average age is 46 years for managers which means that most of the farmers were middle-aged. This fact can be explained by the significant capital required to perform such activities. And of course, having such an asset cannot be possible for the young. The most common level of education was diploma holders. The majority of high school graduates with regard to an aging population are significant and university education was not expected for the majority of them. In terms of record executives, the range of management experience between 11 to 20 years had the highest rate of management experiences. In terms of education, the numbers of managers who have trained were more than the number of managers who have received training. This indicates that education is not important for administrators. The results indicate that the Fisher index farm productivity in total is between 1.0721 and 0.9642 and the average is 0.993 417. The results show that, there is a positive correlation between the cognitive, human and technical skills of managers

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and poultry productivity at the 0.99 significance level. Moreover, the results of multivariate regression analysis showed that the managerial skill, economic decision-making, poulet age, farm size and farm characteristics have the most impact on the productivity.

### 5. CONCLUSION & SUGGESTIONS

In this study, the variables with the greatest effect in increasing the productivity of laying flocks in the study area were identified. Focusing on these variables and proper planning can be attained to greater efficiency in this area. According to the results of this study, the following strategic policies on farm management are suggested. Due to the fact that poultry division require significant

capital, and of course, having such an asset cannot be for the young; therefore, it is recommended to the relevant authorities to provide required facilities loan funds to reflect provisions. Since after passing training programs, farmers can reach to preferred production faster and at lower cost, it is suggested that farm managers are encouraged to consider this issue further. It is also recommended that the managers recognize the training needs of employees. So that they can achieve the level of knowledge required to improve poultry quantitatively and qualitatively.

**Keywords:** Management skills, productivity, lying farms, Fisher Index.

### References (in Persian)

1. Baron, R. A. (2007). Opportunity recognition as pattern recognition: how entrepreneurs connect the dots to identify new opportunities. *ACAD Manage Perspect*, 20(1), 104-119.
2. Beygi-Bandar-Abadi, M. (1999). *Evaluate the impact of various factors on the productivity of broiler farms in Qom*. Proceedings of the First International Congress of Animal Sciences, Karaj, Iran, Retrieved May 26, 2013, from [www.iransas-congress.com/2ndcongress/2nd-congress-1.pdf](http://www.iransas-congress.com/2ndcongress/2nd-congress-1.pdf). [In Persian]
3. Chapman, H. D. (2003). Improvements in the performance of commercial broilers in the USA. *Poultry Science*, 82(1), 50-53.
4. Coelli, J. T., Prasada, R. D. S., Donnell, C. J., & Battese, G. E. (2005). *An Introduction to Efficiency and Productivity Analysis*. New York: Springer.
5. Cravener, T. L., Roush, W., & Mashaly, M. (1992). Broiler production under varying population densities. *Poultry Science*, 71(3), 427-433.
6. Fairchild, B. D. (2005). *Broiler stocking density*. Retrieved March 18, 2009, from <http://www.thepoultrysite.com/search/index.php?q=chicken+farms&cat=0&orderby=&offset=349>
7. FAO. (2005). *Broiler sample profile*. Retrieved June 2, 2010, from <http://www.fao.org/3/a-x6170e/x6170e3g.htm>
8. Feddes, J. J., Emmanuel, E., & Zuidhof, M. J. (2002). Broiler performance, body weight variance, feed and water intake, and carcass quality at different stocking densities. *Poultry Science*, 81(6), 774-779.
9. Gilsing, V. A., & Duysters, G. M. (2008). Understanding novelty creation in exploration networks-structural and relational embeddedness jointly considered. *Tech novation*, 28(10), 693-708.
10. Huusko, L. (2006). The lack of skills: An obstacle in teamwork. *Team Perform Management*, 12(112), 5-16.
11. Izadi, M. ; Dashti, Gh. & Shahir, M. (2004). *Factors affecting poultry production and productivity of their, Case study: Zanjan province*. Proceedings of the Third Congress of Animal Science (Pp. 520-527). Ferdowsi University of Mashhad Publication, Mashhad. [In Persian]
12. Khanaki, H. , Shahir, M. H., & Dashti, Gh. (2011). Evaluation of productivity of production factors in poultry laying in Tehran province. *Journal of Agricultural Economics and Development*. 19 (74), 29-48. [In Persian]
13. Kleyn, R. (2002). *Strategies for managing expensive feed on farm*. Retrieved May 4, 2010, from [http://www.spesfeed.co.za/strategies\\_for\\_managing\\_expensiv.html](http://www.spesfeed.co.za/strategies_for_managing_expensiv.html).
14. Kowalski, T. (1992). Perceptions of desired skills for effective principals. *Journal of School Leadership*, 2(3), 299-309.

15. Lester, A. & Newstrom, J. D. (2001). *What a supervisor should know, the complete management and supervision guidelines*. (Translate: Hashemi, I), Daneshkar Publication, Tehran. [In Persian]
16. McGuffey, C.W. (1980). *Competencies Neededly Administrators: Association of school Business of the United States and Canada Park Ridge*. Research crop. Harvard Business Review.
17. Moeini-zade, H. & Shahvali, M., (2007). Evaluation of factors affecting on animal mortality in poultry units in Iran. *Journal of Iranian Agricultural Sciences*, 38 (2), 333-348. [In Persian]
18. Montel, S. J., Meredith, J. R. S., Shafer, S. M. S., & Sutton, M. M. (2004). *Core/concepts: Project Management in Practice*. New York: John Wiley & sons.
19. Nabiyani, S. (2006). *Evaluation of allocation efficiency and productivity of poultry meat in the cooperative and private sectors in Kerman province*. Proceedings of the Fifth Biennial Conference of Agricultural Economics, Zahedan, Iran, Retrieved Jan 27, 2014 [http://www.civilica.com/Paper-IAEC05-IAEC05\\_051](http://www.civilica.com/Paper-IAEC05-IAEC05_051). [In Persian]
20. Pant, I., & Baroudi, B. (2008). Project management education: The human skills imperative. *International Journal of Project Management*, 26(2), 124-128.
21. Roumanjan, A. (2002). *Productivity and efficiency of broiler farms in Khorasan province*. (Unpublished Msc thesis), Higher Education Center for Agricultural, Karaj, Iran. [In Persian]
22. Sander, J. E., & Lacy, M. (1999). *Management guide for the backyard flock*. The University of Georgia College of Agricultural & Environmental Sciences. Cooperative Extension Service. Retrieved January 3, 2013, from <http://pubs.caes.uga.edu/caespubs/pubcd/L429-w.html>
23. Shanawany, M. M. (1988). Broiler performance under high stocking densities. *British Poultry Science*, 29(1), 43 -52.
24. Shavali, M. (2005). Determining an extension comprehensive model for decrease of wastage of aviculture and optimal usage of this wastage in industrial aviculture farms in Iran. *Scientific researches council of Iran (agriculture commission)*, (548), 29-57.
25. Unger, J. M., Rauch, A., Frese, M., & Rosenbusch, N. (2011). Human capital and entrepreneurial success: A meta-analytical review. *Journal of Business Venturing*, 26(3), 341-358.
26. Van Middelkoop, J. H. (1996). *High density broiler production—The European Way*. Retrieved August 1, 2008, from <http://www.agric.gov.ab.ca/livestock/poultry/psiw9605.html>.
27. Yukl, G. A. (1990). *Measures of Leadership*. U. S. A.: Lexington press.
28. Yusuf, S. A., & Malomo, O. (2007). Technical efficiency of poultry egg production in Ogun state a DEA approach. *Poultry Science*, 6(9), 622-629.

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