Production Challenges in Small and New Poultry Farms in Northern Jordan

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Abstract--- The study aims to understand and measures the problems of production of small and new poultry farms in northern Jordan. The sample was of 150 farms who were under 3 years of age (working since three years or less), and with less than 2k livestock. A simple frequency analysis was conducted on the three sections of the questionnaire used in this research, and the results show that problems of high cost of production (high cost of feed, high cost of young birds) were the most frequent causes of production problems. The results also show high rate of debt among farmers and low profitability because of low product price in the market. The majority of farmers were ready to sell the farms if they got a suitable offer. These problems are the same as problems before 10 years in this sector which shoe no solutions were done in these years for this sector.

Keywords--- Poultry, Jordon, Farms.

I. Introduction

Poultry sectors around the world make a big part of the total economy and the total food consumption, which is particular true in developing countries like Jordan. Small poultry farms are majority in the poultry farms in Jordan, which amount of 83% of total farms in Jordan in 2017 according to the statics of (DOS).

In general, poultry as a food is the easiest and cheapest source of protein. (Udoh and Etim, 2007; Alam, 2000).

The small poultry farms in Jordan is big part of the whole sector which means problems affecting this part of the production group is affecting the whole sector. As of high production costs in general in Jordan and other problems facing the agriculture system in Jordan, poultry sectors also has its own problems which affect the total success of any new farms or small poultry farms in the country. (Khreisat, 2010).

Technology change has been very rapidly within the poultry. Technology moves from free-ranging to confined poultry operations that help to drastically improve the number of birds that one farmer could manage. Use of unoptimized resources and inappropriate materials for the construction and insulation of the farms also impacts the productivity of the farms, with high cost of all production factors around the world made many difficulties for small farms in poultry sector. (Mottet and Tempio, 2017).

Production problems make it hard to sustain a profitable business and thus smaller poultry farms in countries as Jordan will suffer from loss and will close early. According to (Motasem, 2010), the main problems of production in

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small farms in Jordan are high cost of feeds, diseases, late payments, high transport costs, and low knowledge of marketing, with other many varies problems. This research aims to understand the main problems and situation of the new small farms in the northern area of Jordan, as to compare it with problems before 10 years ago or so. The research should be able in a simple process to understand the major problems and weather these problems are the same of production problems existed before in this sector in Jordan.

II. MATERIALS AND METHOD

The present research study was based on primary data, using a questionnaire made for this purpose. To collect required data, visits of several poultry farms were made in the research area. The data was obtained through face to face interview from the poultry farmers. Only new and small farms (two to three years back) were considered for this research. The farms were chosen from the northern area of Jordan (cities of Amman, Erbid, Jerash, Salt).

There were total of 150 new small farms in the period of the last three years, and thus as the population is small, all the farms were considered for this research. Small farms are farms which had livestock up to 2000 only, and new farms are of the three years period only (one year, two years, and three years). Descriptive statistics that include percentages, mean values (averages), and t test were used for data analysis after collecting the data.

The questionnaire had three main sections: 1- production problems 2- ability to continue the business 3-profitable poultry business.

The answers were collected by interviewing the managers of the small farms; mostly they are the owners of the farm. Small farms had few numbers of workers or just family members with one foreign worker.

III. RESULTS AND DISCUSSION

The farms data were as the following:

Farm working period	Count	Percentage	Farm workers number	Count	Percentage
0-one year	24	16%	1-3	98	65 %
One year-2 years	59	39%	3-10	52	35 %
2 years- three years	67	45%	More than 10	0	0
Total	150	100%		150	100%

45% of the farms worked for more than two years, 39% less than 2 years and only 16% are less than one year old. Most of farms (65%) have 1 to three workers only, and 35% had from 3 to 10 workers. No farms had more than 10 workers, and that is logical result as all farms were small and no need for big number of workers to handle.

The results of the first section of the questionnaire were as the following: each respondent will answer (agreed or not agreed) on each problem.

High Feed Cost

Frequency			Percent	Valid Percent	Cumulative Percent
	strongly agree	39	26.0	26.0	26.0
	agree	70	46.7	46.7	72.7
Valid	neither	3	2.0	2.0	74.7
	disagree	38	25.3	25.3	100.0
	Total	150	100.0	100.0	

High Cost of Young Bids

Frequency		Percent	Valid Percent	Cumulative Percent	
	strongly agree	42	28.0	28.0	28.0
Valid	agree	74	49.3	49.3	77.3
	disagree	34	22.7	22.7	100.0
	Total	150	100.0	100.0	

Management Problems

Frequency			Percent	Valid Percent	Cumulative Percent
	strongly agree	5	3.3	3.3	3.3
	agree	34	22.7	22.7	26.0
Valid	neither	10	6.7	6.7	32.7
vand	disagree	100	66.7	66.7	99.3
	strongly disagree	1	.7	.7	100.0
	Total	150	100.0	100.0	

Low Price of the Final Product in the Market

Frequency			Percent	Valid Percent	Cumulative Percent
	strongly agree	102	68.0	68.0	68.0
	agree	17	11.3	11.3	79.3
Valid	neither	16	10.7	10.7	90.0
	disagree	15	10.0	10.0	100.0
	Total	150	100.0	100.0	

Disease and Disease Control Cost

Frequency			Percent	Valid Percent	Cumulative Percent
	agree	75	50.0	50.0	50.0
	neither	4	2.7	2.7	52.7
Valid	disagree	70	46.7	46.7	99.3
	strongly disagree	1	.7	.7	100.0
	Total	150	100.0	100.0	

The most agreed problem was Low price of the final product in the market, (102, 68%), and then Disease and disease control cost (75, 50%), then high cost of young bids (74, 49.3%), then high feed cost (70, 46.7%). The lowest was management problems (34. 22.7%).

Second Section

I am Able to Continue to the Next Year

Frequency			Percent	Valid Percent	Cumulative Percent
	strongly agree	23	15.3	15.3	15.3
	agree	71	47.3	47.3	62.7
Valid	neither	21	14.0	14.0	76.7
vand	disagree	24	16.0	16.0	92.7
	strongly disagree	11	7.3	7.3	100.0
	Total	150	100.0	100.0	

I am Thinking of Expanding the Farm Size

Frequency			Percent	Valid Percent	Cumulative Percent
	agree	10	6.7	6.7	6.7
Valid	disagree	134	89.3	89.3	96.0
vand	strongly disagree	6	4.0	4.0	100.0
	Total	150	100.0	100.0	

I will Close the Farm in One Year or Less

Freque	Frequency		Percent	Valid Percent	Cumulative Percent
	agree	22	14.7	14.7	14.7
	neither	51	34.0	34.0	48.7
Valid	disagree	66	44.0	44.0	92.7
	strongly disagree	11	7.3	7.3	100.0
	Total	150	100.0	100.0	

I Need Capital to Continue

Frequency			Percent	Valid Percent	Cumulative Percent
	strongly agree	18	12.0	12.0	12.0
Valid	agree	41	27.3	27.3	39.3
vanu	neither	17	11.3	11.3	50.7
	disagree	27	18.0	18.0	68.7
	strongly disagree	47	31.3	31.3	100.0
	Total	150	100.0	100.0	

I will Sell the Business if I Got Offer

Frequency			Percent	Valid Percent	Cumulative Percent
	strongly agree	74	49.3	49.3	49.3
	agree	35	23.3	23.3	72.7
Valid	neither	18	12.0	12.0	84.7
vanu	disagree	21	14.0	14.0	98.7
	strongly disagree	2	1.3	1.3	100.0
	Total	150	100.0	100.0	

Don't Recommend Opening a Poultry Farm in Jordan

Frequency			Percent	Valid Percent	Cumulative Percent
	agree	116	77.3	77.3	77.3
	neither	25	16.7	16.7	94.0
Valid	disagree	7	4.7	4.7	98.7
	strongly disagree	2	1.3	1.3	100.0
	Total	150	100.0	100.0	

The most agreed on stamen was of (I don't recommend opening a poultry farm in Jordan) (116-77.3%). The second most agreed stamen was (I will sell the business if I got offer) (109-72.6%), then (I am able to continue to the next year) (104-62.6%), then (I will close the farm in one year or less) (73-48.7%), then (I need capital to continue) (59-39.3%). The lowest agreed on statement was (I am thinking of expanding the farm size) (10-6.7%).

Third Section

My Business is Profitable

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	agree	63	42.0	42.0	42.0
	neither	29	19.3	19.3	61.3
	disagree	58	38.7	38.7	100.0
	Total	150	100.0	100.0	

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I depend Totally on my Business for my Monthly Expenses

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	agree	46	30.7	30.7	30.7
	neither	11	7.3	7.3	38.0
	disagree	93	62.0	62.0	100.0
	Total	150	100.0	100.0	

My Business is the a Family Business

Frequency			Percent	Valid Percent	Cumulative Percent
	strongly agree	1	.7	.7	.7
Valid	agree	62	41.3	41.3	42.0
	neither	3	2.0	2.0	44.0
	disagree	83	55.3	55.3	99.3
	strongly disagree	1	.7	.7	100.0
	Total	150	100.0	100.0	

I Return my Capital in the Period of Working till now

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	10	6.7	6.7	6.7
	agree	81	54.0	54.0	60.7
	neither	18	12.0	12.0	72.7
	disagree	41	27.3	27.3	100.0
	Total	150	100.0	100.0	

My Business is in Debt

Frequency			Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	37	24.7	24.7	24.7
	agree	72	48.0	48.0	72.7
	neither	3	2.0	2.0	74.7
	disagree	29	19.3	19.3	94.0
	strongly disagree	9	6.0	6.0	100.0
	Total	150	100.0	100.0	

The most agreed on statement was of (My business is in debt) (109-72.7%), then (My business is profitable) (92-61.3%), then (I return my capital in the period of working till now) (91-60.7%), then My business is a family business (63 – 42%), then the lowest was (I depend totally on my business for my monthly expenses) (57, 38%).

The results show that the most occurred problems are high feed cost and low price of product in the market, with the high cost of young bird and disease treatment. These problems are due to the dependent of Jordan farmers on imported feed, young birds and medicines. The extra cost of transportation and the global price range with the high taxes on these products put extra pressure on small farms.

In the second section the results show that farmers are willing to sell the business and don't recommend opening new farms, also they are not thinking of expanding the farm size. Even though they are able to continue to the next year, yet they will take any chance to sell the business. According to the third section, most farmers were in debt even though the farm was profitable, but this means that they had to start with debt and the profit is not covering the loans and the other expenses. Thus the owners are willing to sell if they got the chance. As high production cost is persistence, the low price of chicken in the market is causing even more damage to the small new farms.

IV. CONCLUSION

This research show how the production costs are high in Jordan for small and new farms, with the rate of desire to sell is high for new farms because of the low profitability, and high frequency of farms under dept. The problem of high cost of feeds, treatment and young chicken are problems not solved since many years in the poultry sector in Jordan. High debt and high frequency of farms under debt are caused by low capital for starting the farm in general among farmers in Jordan. This research show that problems mentioned here are the same as 10 years before by other researches and that show no solutions done in the country for the poultry sector in general. Further researches are needed to be done on each problem to understand it in more specific way so that solutions can be presented.

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