

The Obstacles Facing the Backyard Chicken Breeders in Some Villages of Bamerny Sub-District of Duhok Governorate

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Abstract

The study was conducted in the Bamerny sub-district of Duhok Governorate to identify the extent obstacles facing backyard chicken breeders. Sixty chicken breeders were comprehensive selected. Questionnaire of three fields of obstacles facing chicken breeders: production, marketing, and diseases, covering 16 obstacles was prepared. The results showed that (60%) of the respondents mentioned that the obstacles they face are medium and large size obstacles. The results also indicate that the obstacle (high cost of transportation) ranked first among (16) with an average of (4.017), while the obstacle (inappropriate environmental conditions) came in the last rank, with an average of (1.59). The results also shows that most of the respondents were younger than 30 years (46.6%) and had been educated beyond Primary and diploma levels (25%). As clear most of the respondents (70%) had experience in chicken production was ten years and more. The results illustrate that for most of the respondents (58.3%) their chicken houses capacity was between 20-52 birds. The results of the research showed that the level of Sources of information used in chickens' production (53.3%) degrees, in a small group. problems and obstacles facing the individual backyard chicken breeders can be addressed a supported through government agencies, active extension services, and stakeholders to solve their problems, access relevant information, and uptake improved management techniques.

Key Word: obstacles, backyard chicken, breeders, Duhok.

المعوقات التي تواجه مربى الدجاج المنزلي في بعض قرى ناحية بامرني - محافظة دهوك

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المستخلص

أجريت هذه الدراسة في ناحية بامرني بمحافظة دهوك للتعرف على المعوقات التي تواجه مربى الدجاج المنزلي. عن طريق اختيار عينة شاملة اختير (60) مربى دجاج. وتكون استمارة الاستبيان من جزئين الجزء الاول تضمن المتغيرات الشخصية وتكون الجزء الثاني: ثلاثة مجالات من المعوقات التي تواجه مربى الدجاج هي: الإنتاج، والتسويق، والأمراض. وأظهرت النتائج أن (60%) من المبحوثين كانت حجم المعوقات التي يواجهونها هي معوقات متوسطة وكبيرة كما أشارت النتائج إلى أن المعوق (ارتفاع تكلفة النقل) جاءت في المرتبة الأولى من بين (16) معوق بمتوسط حسابي (4.017)، بينما جاءت المعوق (الظروف البيئية غير الملائمة) في المرتبة الأخيرة بمتوسط (1.59). كما أظهرت النتائج أن معظم المستجيبين تقل أعمارهم عن 30 عامًا (46.6%) وتعلموا ما بعد المستوى الابتدائي والدبلوم (25%). وإن معظم المبحوثين (70%) لديهم خبرة في إنتاج الدجاج وكانت عشر سنوات فأكثر. النتائج توضح أن معظم المبحوثين (58.3%) كانت سعة بيوت الدجاج ما بين 20-52 دجاج. وأظهرت نتائج البحث أن مستوى مصادر المعلومات المستخدمة في إنتاج الدجاج (53.3%) في مجموعة صغيرة. المشاكل المعوقات التي تواجه مربى الدجاج المنزلي يمكن معالجتها بدعم من المنظمات غير الحكومية، وخدمات الإرشاد، وأصحاب المصلحة لحل مشاكلهم، والوصول إلى المعلومات ذات الصلة، واستيعاب تقنيات الإدارة المحسنة. الكلمة المفتاحية: معوقات ، الدجاج المنزلي، مربى الدجاج، دهوك.

Introduction

Poultry production is considered an opportunity for many people in rural areas to improve their livelihoods and provide additional economic income. It provides quick turnover on capital to investors and foreign exchange. Ahima (2005). Most of the rural populations in the developing world keep a flock of chickens under traditional backyard farming or free-range system IFPRI (2010). The backyard chicken started in the country on a smaller scale, which brought an economic return to the distressed man, unemployed youth, and women along with some interested semi-urban chicken raisers to meet the growing demand for meat and eggs.

chicken plays an important role in human nutrition, national income, employment, and income resources in rural areas. The importance of chicken as a source of income for the landless and marginal breeders, particularly women, has become increasingly recognized Ogunlade and Adebayo, (2009). Gueye (2009) reported that chickens in rural areas are an important system for supplying the fast-growing human population with high-quality protein and providing additional income to resource-poor small breeders, especially women. Saleque and Mustafa (1996) studied

possibilities for women's participation in poultry development and concluded that most of the rural and landless women (70%) are directly or indirectly involved in chicken-rearing activities, but they have little experience. Backyard chicken farming is regarded as a valuable tool for enhancing the nutritional status and socio-economic of people in rural areas by providing additional employment and a cheap source of protein Kumar (2019)

chicken production in rural areas suffers from serious problems including issues with management, marketing access, diseases, and other facilities, as well as, a lack of knowledge of rural breeders regarding different aspects of chicken production, such as feed quality, disease prevention, and control techniques. Hai et al. (2008) determined that in rural areas, farm size, livestock population, increased income and better knowledge regarding health and nutrition should increase per capita poultry consumption. This is why the activities of backyard chickens have been studied in a multi-dimensional way, such as in management methods, chicken health and diseases, biosecurity at the international level, and the marketing process Mainali (2017), Pires (2019), Dipillo (2019).

In addition, based on a pre-visit survey in the area of study and the need for the background of reproductive performance of backyard chicken breeders. Although there is a huge potential for breeding chickens in the study area, the system of production is traditional. As a result, chickens are exposed to many obstacles. In the study area research has not been reported on obstacles faced by backyard chicken breeders. Determination of these obstacles could be useful in improving productivity. The study was undertaken to determine and rank the obstacles facing backyard chicken breeders and determine the relationship between obstacles and some independent variables of backyard chicken breeders.

Research Objectives

To be able to critically examine the obstacles facing the backyard chicken breeders in Bamerny sub-District/Duhok Governorate/Kurdistan Region of Iraq, this study seeks to achieve the following specific objectives;

- 1- To determining the extent of the problems facing backyard chicken breeders.
- 2- Arranging the obstacles facing backyard chicken breeders in the study area in general.
- 3- Arranging the obstacles facing backyard chicken breeders in each field of research.
- 4- Identifying the personal characteristics of the respondents (age, educational level, years of work in the field of poultry farming, Number of chickens kept on the farm, Sources of information used in chickens' production).

Materials and Methods

Descriptive approach was used. A comprehensive sample of chicken breeders in some villages of Bamerny sub-district in Dohuk governorate was selected, and 10 breeders were excluded, who were included in measuring the reliability of the tool, bringing the total number of

breeders to 60 respondents. The sample was used to extract the reliability of the sample, as its value was 0.87 using Alpha Cronbach's

Data Collection

Data were collected from January to March 2022. The researchers collected primary data by directly interviewing selected breeders using a questionnaire. Information was also collected regarding the demographic characteristics of breeders, and problems related to production, marketing, and diseases.

Methodology

The research was conducted in Bamerny sub-district / Dohuk governorate / Kurdistan Region of Iraq. The research data was collected from the respondents using a questionnaire and through a personal interview. The questionnaire was designed in two parts. The first part included socio-economic characteristics: (age: it is the year age of the respondent at the time of study data collection. educational level: it means formal education that the breeders acquired the highest level, it was assigned codes for each level (1,2,3,4,5,6,7) according to the following level (Illiteracy, Reading and writing, primary, Secondary, High school, Institute, College) respectively. years of work in the field of poultry farming: Experience has been measured by the number of years of work in the field of chicken production. The number of chickens on the farm: The total chicken in the farm is allocated for breeding and is estimated by the number of chickens. and sources of information in the field of chicken production: In order to measure this variable, each variable was assigned four alternatives (always, sometimes, rarely, and do not use). The numerical codes were given from (4, 3, 2, 1) respectively. The second part included a pentagonal scale to determine the size of the obstacles facing the chicken breeder in the backyard, consisting of (16) obstacles distributed over three fields: the field of production (7) obstacles, the field of marketing (4) obstacles, and the field of diseases (5) obstacles. Five alternatives were placed before each obstacle: (very large, large, medium, small, none), given weights (5, 4, 3, 2, 1) respectively

Data analyses

Quantitative data were compiled, tabulated, and analyzed. Data were analyzed using descriptive statistics which are percentage, frequency distribution, mean, standard deviation, and also correlation analysis using the Spss program.

Result and Discussion

1-To determine the extent of the problems facing backyard chicken breeders in the study area.

The results of the research showed that the lowest numerical value for the size of the obstacles facing chicken breeders in the research area is (30) and the highest numerical value is (53). These obstacles were divided according to their size into three categories as in Table (1). The results indicate that the size of the obstacles facing the respondents Small by (40%), medium by (48%), and large by (12%), and this indicates that these obstacles are medium and large in size from the

respondents' point of view, and at a rate of (60%), this means that more than one-third of the respondents admitted that these obstacles are medium obstacles and the large size, which requires the competent authorities to work to overcome these obstacles.

Table 1: the extent of obstacles that affect chicken production in the study area.

Categories	Frequency	%	\bar{x}
Small (30-37)	24	40	34.231
Medium (38-45)	29	48	42.471
Big (46-53)	7	12	49.428
Total	60	100	

2-. Arranging the obstacles facing backyard chicken breeders in the study area in general.

The results of the research showed that the problems and obstacles of chicken breeders, in general, problems affecting chicken breeders vary in their effect level (table 1), problems of the (high cost of transportation) were perceived as the most serious one with a mean (4.017), while the least serious problem was (inappropriate environmental conditions) with a mean (1.59).

Table 2: The obstacles facing backyard chicken breeders in general

Obstacles	\bar{x}	Rank
High cost of transportation	4.017	1
High feed prices	3.633	2
Lack of government cooperation with chicken breeders	2.9	3
Lack of technology in chicken production	2.717	4
Lack of reliable sources of information on chicken farming	2.667	5
High prices of medication and vaccination	2.5	6
High percentage losses	2.4	7
Medications and vaccines are not good or unreliable	2.35	8
Poor marketing information	2.2	9
High losses of feed	2.183	10
Lack of accurate diagnostic possibilities	2.15	11
Lack of central testing laboratories for vaccine screening and non-invasive diagnosis	2.083	12
Imported eggs and frozen chicken meat	2.017	13

Spread of chicken diseases	1.95	14
Market price fluctuations	1.767	15
Inappropriate environmental conditions	1.59	16

3- Arranging obstacles facing backyard chicken breeders in each field of research

A- The obstacles facing chicken backyard breeders in field of production:

The results of the research showed that the first paragraph ranked as (high cost of transportation) with an average of 4.017, This might because of high fuel prices and the lack of government support in this aspect. while the last paragraph ranked is (Inappropriate environmental conditions) with an average of 1.590.

Table 4: The obstacles facing chicken backyard breeders in field of production

Obstacles	\bar{x}	Rank
High cost of transportation	4.017	1
High feed prices	3.633	2
Lack of government cooperation with chicken breeders	2.900	3
Lack of technology in chicken production	2.717	4
Lack of reliable sources of information on chicken farming	2.667	5
High losses of feed	2.183	6
Inappropriate environmental conditions	1.590	7

B-The obstacles facing chicken backyard breeders in field of diseases control:

The results of the research showed that the first paragraph ranked as (High prices of medication and vaccination) with an average of 2.500, the medical facilities are poor at district level livestock offices. The prices of essential chicken drugs are high. They nearly always urgently need to buy vaccines at high prices on the open market. while the last paragraph ranked as (Spread of chicken diseases) with an average of 1.950

Table 5: The obstacles facing chicken backyard breeders in field of diseases control

Obstacles	\bar{x}	Rank
High prices of medication and vaccination	2.500	1
Medications and vaccines are not good or unreliable	2.350	2
Lack of accurate diagnostic possibilities	2.150	3
Lack of central testing laboratories for vaccine screening and non-invasive diagnosis	2.083	4
Spread of chicken diseases	1.950	5

C- The obstacles facing chicken backyard breeders in field of marketing:

The results of the research showed that the first paragraph ranked as (High percentage losses) with an average of 2.400, this is due to marketing problem is one of the most important problems for the chicken farm owner, when they can't buy their product or don't have consumer. while the last paragraph ranked as (Market price fluctuation) with an average of 1.767.

Table 6: The obstacles facing chicken backyard breeders in field of marketing

Obstacles	\bar{x}	Rank
High percentage losses	2.400	1
Poor marketing information	2.200	2
Imported eggs and frozen chicken meat	2.017	3
Market price fluctuations	1.767	4

4- Identifying the personal characteristics of the respondents (age, educational level, years of work in the field of poultry farming, Number of chickens kept on the farm, Sources of information used in chickens' production).

Most of the respondents were younger than 30 years (46.6%) and had been educated beyond Primary and diploma level (25%). As clear in table 7 most of the respondents (70%) experience in chicken production was ten years and more, which means that most of them are supposed to the professionals in this type of industry, and they depend on their livelihood in this sector to gain money. The results in table 6 illustrate that for most of the respondents (58.3%) their chicken houses capacity was between 20-52 birds. The results of the research showed that the level of Sources of information used in chickens' production (53.3%) degrees, in a small group.

Table 7: Describe the personal characteristics of the respondents. (N = 60)

Variables	Categories	Frequency	%	\bar{x}	S.d
Age	Small (20 – 29)	28	46.6	32.52	10.060
	Medium (30 – 39)	19	31.7		
	Big (more than 40)	13	21.7		
educational level	Illiterate	3	5		
	Read and write	10	16.7		
	Primary	15	25		
	Secondary School	6	10		
	Diploma	15	25		
	Bachelor's	11	18.3		
years of work in the field of poultry farming	Few (1 – 9)	24	40	11.92	6.670
	Medium (10 – 18)	23	38.3		
	Many (19 – 27)	13	21.7		
number of chickens kept on the farm	Small (20 – 52)	35	58.3	56.68	48.28
	Medium (53 – 85)	20	33.3		
	Large (more than 86)	5	8.4		
sources of information used in chickens' production	Small (89 – 134)	32	53.3	140.92	36.900
	Medium (135 – 180)	19	31.7		
	Large (181 – 226)	9	15		

Conclusion and Recommendations

1- The size of obstacles is average and tends to decrease, and this is due to the experience possessed by chicken breeders, and accordingly researchers recommend the importance of spreading the culture of chicken farming in homes to achieve self-sufficiency in the country.

2- The study results reveal that the three greatest factors, hindering chicken breeders in the targeted area, are (high cost of transportation, high prices of medication and vaccination, and high percentage losses)

3- The field of chicken breeding has outperformed first place over the rest of the fields. Therefore, researchers recommend the importance of addressing the obstacles facing breeders in the production stage and supporting them with information sources related to chicken farming.

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