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Full Length Research Paper

Analysis of farm management skills in small scale broiler poultry producers in Botswana

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This quantitative study analyzed farm management skills among smallscale broiler poultry producers in Botswana.The study adopted an exploratory and descriptive survey research design. Seven areas of farm management skills namely; planning skills, accounting and financial management skills, production management skills, product procurement and marketing skills, decision making skills, risk management skills, and specific technical skills were analysed. A valid and reliable questionnaire composed of 63 closed-end statements/items under seven areas of farm management skills was used for data collection through a survey of 60 randomly sampled small scale poultry farm operators in Botswana. Data were analyzed through descriptive statistical tools whereby the level of farm management skills were determined by calculating means and standard deviations of the management skill. Findings revealed that the broiler producers had skills above average level only in specific technical skills whereas the skill levels in the remaining six farm management skills were found below the average level. Therefore, in order to improve the efficiency and productivity of broiler farming, it was recommended that the small scale broiler poultry producers should be adequately trained in areas of planning skills, financial management skills, production management skills, product procurement and marketing skills, decision making skills and risk management skills.

Keywords: Botswana, broiler production, farm management, level of skills, management skills, poultry production, small scale farmers.

INTRODUCTION

Poultry includes a wide variety of domestic birds including chickens, ducks, geese, turkeys, guinea fowls and ostriches. Poultry production includes egg production and broiler production. Poultry production is a very important livestock sector as it has high feed conversion rate, high fecundity and contributes to economic gains (Ezeibe, 2010). Banerjee (2005) stated that poultry production is a lucrative business which requires little investment to start. Poultry farming is an ancient business enterprise, but commercial and scientific poultry farming is a very new and growing enterprise in Botswana. Broiler production is the most common poultry production enterprise in Botswana. Chickens are the most commonly reared broiler in the country, followed by ostriches. Broiler chicken production is an important source of income and employment in the country. Meat from broiler chickens has become an important dietary component and important source of high quality protein. It is also an excellent source of vitamins particularly vitamin A, thiamin, riboflavin and niacin. The droppings of broilers are a very important source of manure used in crop production (Taha, 2003). Thus, poultry production plays an important role in employment creation, dietary

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nutritional improvement and poverty alleviation in the country.

Generally, poultry farming has not been developed and profitable in most of the countries including Botswana because of reasons such as low productivity, weakness in management, inefficiency of enterprises and practicing of traditional production methods (Mirakzadeh, et al, 2010). However, the sector has experienced transformation into a modern and dynamic commercial sector during the last decade. Many countries have initiated programs aimed at improving small-scale poultry as a means of helping to bring socio- economic benefits to rural communities (Tyson, 1995; Ugwu, 2009). The government of Botswana recognizes and supports poultry farming as one of the investment opportunities with greater potential to create employment and alleviate poverty, especially among youth and women. Consequently, production incentives in recent years have represented dynamism of the poultry industry in the country. This new economic environment has created new challenges for producers. These challenges included expansion of poultry industry, changes in technological development, statutes and regulations, scattered and dispersed industry all over the country, low level of skilsl and knowledge among producers, dynamic nature of poultry productions, dependence on imported raw materials, high fluctuation of input prices and difficult and complicated marketing of products (Aakkula et al., 2002; Sonkkila, 2002; Suutarinen, 2003). At times these challenges in the poultry industry have made it to be one of the most risky enterprises. Such challenges place great demands on the entrepreneurial skills of the poultry producers. Rapid change in all the agribusiness sectors calls for appropriate development of farm management skills by farmers for their future viability (Rolls, 2001; AGSP, 2002). Therefore, poultry producers should have a high level of management skills and ability so as to overcome the challenges facing poultry production in Botswana.

In addition, to the three factors of production namely; land, labor and capital; management is the fourth important factor in any business activity. Management has an important role in organizing and combining the other three factors of production so as to run the enterprise smoothly and profitably. Possession of appropriate managerial skills help the farmers to maximize returns by taking informed decisions about what to produce, by what method, when and how much to produce and for whom (AL-Rimawi, et al. 2006 and Kilpatrick, 2004). Onuka and Olaiton (2007) added that poultry producers need skills for daily inspection and sanitation of the farm, proper feeding management of resources and keeping records of farm activities. The advanced management practices in strategic planning, finances, marketing, labour management, and in farm operations may help reduce work strain and stress (Simpson et al., 2004; Suutarinen, 2004) and also improve the economic success of farmers (Ondersteijn et al., 2003). Different descriptions of management skills form a basis for management studies and have been used in various farm management studies (Sonkkila, 2002; Franks, 2006; Ondersteijn et al., 2006). A skill is an ability to do something expertly well (Egbe, 2005; Yaaghubi, et al., 2009). In the context of this study, skills are the abilities of poultry farmers to take appropriate decisions and set goals of the poultry enterprise, organize available resources, utilize technical skills in poultry enterprise, manage risks and take informed decisions toward maximizing profits. Therefore, the managers of agriculture production enterprises including poultry production are considered as the most efficient agent to improve the efficiency and productivity of the enterprise. Therefore, analysis of the skills and their extent of utilization by poultry producers are important. Producers in this study means managers who apply various skills to run a poultry production unit. According to Hornby (2010) analysis means investigation, examination, enquiring or revering something. In the context of this paper, analysis means studying or examining the skills possessed and utilized by broiler poultry producers.

In order to run any enterprise (poultry farming included) profitably, the operator requires good knowledge and skills in the activities involved in management of the enterprise. Management is a dynamic process and involves various factors. Weak management of production factors and economic inefficiency of production enterprises were identified as major agricultural problems faced by small scale producers (Allahyari et al., 2011). Upgrading small scale poultry producers' management skills will enable them to cope with the rapid changes in agribusiness environment and run their businesses more efficiently and profitably. In order to determine the management skill areas in which the broiler farmers need to be upgraded, it is important to have baseline information on the status of current level of farm management skills. There has been insufficient research done on the analysis of management skills in small scale poultry producers in Botswana. Therefore, the purpose of this study was to analyze farm management skills possessed and utilized by small scale broiler poultry producers in Botswana. The specific objective of this study was to determine the level and extent of utilization of various farm management skills in small scale broiler poultry operators in Botswana.

METHODOLOGY

Research Design

This quantitative study was conducted to analyze the farm management skills in small scale broiler poultry producers in Botswana, making the study research design an exploratory and descriptive in nature. Specifically, both the exploratory and descriptive

research designs were used to obtain a complete and accurate description of a situation of the level of farm management skills among broilers poultry producers. Gray *et al,* (2006) suggested that exploratory studies seek to examine what is happening and to ask questions about it. Survey research provides efficiency in collecting large amounts of data with minimal cost and in a non-intrusive manner (Bernhardt, 2004; Creswell, 2008). Borg and Gall (1989) stated that the descriptive research method is used to describe, "What is." "Descriptive research studies are designed to obtain information concerning the current status of phenomena which direct the researchers toward determining the nature of the situation as it exists at the time of the study" Ary, Jacobs and Razavich, (1990, p. 286). Descriptive research "asks questions about the nature, incidence, or distribution of variables; it involves describing but not manipulating the variables" (Ary, Jacobs & Sorensen, 2010, p.640). A quantitative survey research investigates "trends, attitudes, or opinions of a population by studying a sample of that population" Creswell (2008: 146), will be used to analyse the level of farm management skills in small scale poultry producers. As the survey method entails the hidden truth and facts about any social aspect and perception is a social aspect (Babbie, 2007), a survey was considered as the best method to explore the facts on the levels of farm management skills among the broilers poultry producers.

Instrumentation for Data Collection

The study used a descriptive survey method and a survey instrument was designed to collect the information on the perception of broilers poultry producers on the farm management skills. Literature on management and education material for farming were reviewed to determine the knowledge domains generally considered significant in farm business management (e.g. Rougoor et al., 1998; Boehlje et al., 2000; Timonen, 2000; Sonkkila, 2002). Based on the information from literature, a questionnaire was constructed for the study. The questionnaire composed of two sections. The first section had items/questions on personal characteristics of farmers and, the second section had 63 close-ended statements/items on seven different categories of farm management skills namely; planning skills, accounting and financial management skills, production management skills, product procurement and marketing skills, decision-making skills, risk management skills, and specific technical skills. Each of these farm management skills comprised of a number of items/questions measuring the specific skills. In order to measure respondents' perspective to skill ability rate in all items/questions under each of the farm management skill, a six-point Likects' scale was used. These six point scales indicated the level of farm management skills which were ranked from 0= No skill, 1=very low skill, 2=low skill, 3=moderate skill, 4=high skill to 5=very high skill. The validity of the questionnaire was accomplished by a panel of experts in the field of agricultural economics and farm management. Reliability of the questionnaire was estimated by calculating Cronbach's alpha. Coefficient alpha developed by Cronbach (1951) was determined as a general measure of the internal consistency of the multi-item scale. This coefficient is not only the most widely used estimator of reliability but also has been the subject of considerable methodological and analytical attention. Alpha has become one of the foundations of measurement theory (Cortina, 1993). Reliability of the instrument was estimated at 0.87which indicated that the questionnaire had high reliability.

Data Collection and Data Analysis

The valid and reliable questionnaires were administered for data collection from the sampled poultry farm operators. The target population for this research was the small scale poultry production operators who have been involved actively in broiler production at least for two years. A total of 60 farm operators were selected through a random sampling method. The data were collected by the researchers. The data were entered in to the SPSS 23 software package for the analysis. Descriptive statistics was employed for data analysis whereby mean and standard deviation were calculated. The mean and standard values were calculated for each item/questions under each of the seven categories of farm management skills. An average response mean value of 2.5 and above (2.50-4.0) indicated that the skill item/question was moderate to very high level whereas average responses mean value of lower than 2.5 indicated that the skill item/question is low to very low level.

RESULTS AND DISCUSSION

The study was conducted to analyze the farm management skills among small scale broiler poultry producers in Botswana. Means and standard deviations were calculated to determine the levels of various farm management skills in small scale broiler poultry producers. Each of the skill items/questions had means ranging from 0 (No skill) – 5 (Very high skill). The findings of the study are presented and discussed in the following subsections.

Planning Skills

The planning skills refer to the skills which help producers in planning all the activities on the farm. Six statements/items were used to measure the level of planning skills. The mean and standard deviation of each statement are presented in Table 1.

Ability to develop a production program ranked the highest (M=2.28, SD=1.21), followed by ability to pre-

Table 1. Levels of various planning skills in small scale broiler poultry producers.

Planning skills	Mean	SD
Ability to develop production program	2.28	1.21
Ability to predict the required inputs over a production period	2.27	1.02
Ability estimate and predict income from production over a production period	2.12	1.25
Ability to estimate and predict production costs over a production period	2.05	1.24
Ability to identify production targets in the short and long term	2.02	1.21
Ability to estimate and predict production rates over a production period	1.85	1.22
Mean	2.10	

dict required inputs over a production period (M=2.27, SD=1.02).The farmers were poor in estimating and predicting the production rates over a production period (M=1.85, SD=1.22) followed by ability to identify the production targets in the short and long term (M= 2.02, SD=1.21). These results have implication on the planning on the marketing of the produce as the producer have very poor skills in identifying the production target as well as poor ability in estimating the production on the farm. Table 1 also indicated that the average level of planning skill among the poultry producer's was 2.10 which indicated the low to moderate level of planning skills. Planning is very important segment of management and the project implementation phase becomes difficult without proper planning. Thus, broiler poultry producers need to improve their planning skills in order to be able to run their enterprises efficiently and profitably.

Accounting and Financial Management Skills

The accounting and financial management skills refer to the skills which help producer in managing the recording, and management of the accounts and finance related aspects of the farm. Nine statements were used to measure accounting and financial management skills in the small scale poultry producers. The mean and standard deviation of each statement are presented in Table 2.

Ability to improve financial management skills through continuing education ranked highest (M=2.77, SD=1.33). This result indicated that broiler producers were willing to be trained in the financial management skills. Ability to record product produced in poultry production enterprise ranked second (M=2.55, SD=1.38), indicating that broiler producers in the sample were able to keep their enterprise production records. All other seven statements measuring the accounting and financial skill had mean scores below the cutoff point (M ≤ 2.5) indicated that the producer in most of the areas of accounting and financial skills are not adequately equipped. The broiler producers had the lowest mean score in the ability to manage income taxes effectively (M=1.10, SD=1.27). This result indicated that they possessed low to moderate skill level in this area. However, the mean of the farm accounting and financial management skills among poultry producers' was 1.97, which indicated a very low to low level of skill in accounting and financial management. This low skill level may be attributed to the fact that most of the poultry producers had poor educational background. Broiler producers need to improve this skill as accounting and financial management plays a pivotal role in any enterprise. It provides all indicators of profit or loss and the out flow and inflow management of the capital. Therefore, there is need to improve the accounting and financial management skills through uplifting the educational level as well as training broiler producers in this crucial area of farm management skill.

Production Management Skills

The production management skills involved the skills areas which are related to the production process of rearing the broilers. Ten statements were used to measure production management skills,. The mean and standard deviation of each statement are presented in Table 3. Results indicated that the broilers poultry producers had the highest level of skill in closely monitoring stored feed and other inventories for quality (M=2.68, SD=1.20). Ability to evaluate alternative methods of acquiring production skills, including workshops had the second highest mean skill-level score (M=2.65, SD=1.22). The broiler producers were poor in the ability to achieve levels of poultry production higher than benchmarked production (M=1.57, SD=0.91). The producers were also poor in the use of the least cost mix of inputs for the poultry production (M=1.33, SD=1.05). This result indicated that the ability to organize and combine proper inputs was the most lacking among the producers. This incompetence on the part of producers would have adverse bearing on the profitability of the broiler production enterprises in the country which might be a reason for closure of the production of broiler farms. Moreover on average, the producers'

Table 2. Levels of various accounting and financial management skills in small scale broiler poultry producers.

Accounting and financial management skills	Mean	SD
Ability to improve financial management skills through continuing education	2.77	1.33
Ability to record product produced in poultry production enterprise	2.55	1.38
Ability to record consumed inputs in poultry production enterprise	2.32	1.19
Ability to record and calculation of profit and loss in poultry production enterprise	2.20	1.39
Ability to purchase needed inputs to enjoy discount prices	2.07	1.35
Ability to record and calculate the amount of initial capital in poultry production enterprise	2.03	1.52
Ability to effectively use of financial and credit from various sources	1.45	1.31
Ability to create a good and effective financial accounting system	1.25	1.28
Ability to manage income taxes effectively	1.10	1.27
Mean	1.97	

Table 3. Levels of various production management skills in small scale broiler poultry producers.

Production management skills	Mean	SD
Ability to closely monitor stored feed and other inventories for quality	2.68	1.20
Ability to evaluate alternative methods of acquiring production skills, including workshops	2.65	1.22
Ability to quickly identify problems in production performance and take corrective action	2.62	1.17
Ability to use production consultants effectively	2.60	1.34
Ability to identify influence of production practices on quality and level of production	2.43	1.11
Ability to complete all production activities in a timely manner	2.05	1.11
Ability to select the technologies and methods that make efficient use of resources	1.92	1.21
Ability to establish appropriate production benchmarks for evaluating poultry production	1.60	1.10
Ability to achieve levels of poultry production higher than benchmarked production	1.57	.91
Ability to use the least cost mix of inputs for the poultry production	1.33	1.05
Mean	2.04	

production management skill level was rated nearly low (M=2.04). Therefore, there is a need to equip the producers with relevant production management skills enhancing the profitability and sustainability of broiler poultry farming.

Product Procurement and Marketing Kills

This category of farm management skills included the skill areas which help the producers in buying the inputs and selling the outputs for the poultry farms.

Thirteen statements were used to measure product procurement and marketing skills of broiler producers. The mean and standard deviation of each statement are presented in Table 4.

Table 4 indicated that the average mean skill-level in this area of farm management was low to moderate ability (M=2.13). The ability to develop positive relationships with suppliers to sell product was ranked highest (M=3.48, SD=1.20) while the producer's ability to supply product directly to consumers was ranked second (M=3.43, SD=1.17). These results indicated that there was a direct contact between the suppliers and producers. This relationship is likely to reduce the role of supplying agents and improve on the profit margins of the enterprises. However, the situation on the ground was quite different. A large amount of products are bought and sold by the agents (large scale poultry producers) and then supplied to the large suppliers. The reason for this situation needs to be investigated further. Ability to evaluate alternative methods of product pricing including forward contracts, futures contracts, and other options was found to be the most lacking among this set of skills (M=.68, SD=1.21). As highlighted by Yaaghubi et al (2009), these broiler producers need not only focus on the production but also in effective marketing of their product to be successful in their businesses.

Table 4. Levels of various product procurement and marketing skills in small scale broiler poultry producers.

Product procurement and marketing skills	Mean	SD
Ability to develop positive relationships with suppliers	3.48	1.20
Ability to supply product directly to consumers (rather than selling to slaughterhouses)	3.43	1.17
Ability to choose the best time to sell the product	3.27	1.40
Ability to develop positive relationships with buyers	3.08	1.31
Ability to analyse demand, supply and price of chicken	2.27	1.55
Ability to understand product differentiation	2.23	1.25
Ability to Familiar with modern style of packaging products	2.17	1.29
Ability to develop strategies to ensure access to input and product markets	1.87	1.24
Ability to analyse government policy on poultry markets	1.48	1.27
Ability to evaluate alternative methods of selling, such as group selling and marketing networks	1.45	1.30
Ability to understand marketing loan and other government programs for poultry	1.25	1.20
Ability to evaluate alternative methods of purchasing, such as group buying, contracting, and purchasing alliances	1.10	1.47
Ability to evaluate alternative methods of product pricing including forward contracts, futures contracts, and other options	.63	1.21
Mean	2.13	

Therefore, there is needed to strategies effective interventions to improve production and contract agreements in favour of small scale poultry producers.

Decision Making Skills

Six statements were used to measure level of decision making skills among broiler producers in the country. The mean and standard deviation of each statement are presented in Table 5.

Results showed that the average mean skill-level in this area of farm management was low to moderate ability (M=2.20). The producers had the highest level of skill in effective use of production advisors (economical, veterinary, nutrition etc.) (M=2.73, SD=1.29). Ability of the producers to make good decisions about use of technologies ranked second (M=2.32, SD=1.24).The broiler farmers were found to be deficient in the ability to identify and correct manufacturing problems (M=1.65, SD=1.09) and ability to analyze and solve situations which they never faced in the past (M=2.12, SD=1.01). The inability of the operators to identify and correctly solve farm problems may be responsible for low productivity in the broiler farms and the inability of the poultry industry to meet increasing demand for the poultry products. Therefore, producers need to be trained to enhance their critical thinking skills to enable them to identify and solve the farm problems.

Risk Management Skills

Nine statements were used to measure level of risk management skills among poultry producers, the mean and standard deviation of each statement are presented in Table 6. The ability to understand that risk is sometimes necessary was ranked highest in this area with a mean skill-level score (M=2.47, SD=1.51). This result represented low to moderate skill level of broiler producers in the country (Table 6). It also highlighted that the producers are not very much willing (only moderately) to take the risk. All the other eight areas of skill had mean skill-level scores below2.5 (M<2.5) implying low levels of skill. Skill in predicting and developing strategies for facing the dangers condition (M=1.90, SD=1.39), and the skill in managing the financial and production risks (M=1.60, SD=1.42) were the second and third skill in this area, respectively. Ability of developing contingency plans as a method of dealing with future uncertainties was the lowest ranked among all the risk management skill areas (M=.85, SD=1.49). This result has serious implications on the continuity of the enterprise. In other words, if there is any failure in the production, the producer has only one option of shutting down the production.

The results indicated that respondents average skill in this area is low to very low (M=1.58). However, it is important to understand that poultry production is one of the most risky enterprises. However, no business can be initiated and run effectively without taking a risk. It is therefore, necessary for the producers to have high level of risk management skills so as to deal with uncertainties and, avert any possible risk.

Specific Technical Skills

The specific technical skills are the skills which are specifically related to the techniques and processes

Table 5. Levels of various decision making skills in small scale broiler poultry producers.

Decision making skills	Mean	SD
Ability to effectively use of production advisors (economical, veterinary, nutrition etc.)	2.73	1.29
Ability of making a good decision about use of technologies	2.32	1.24
Ability to use of best management operations in poultry production	2.20	1.27
Ability of taking right decisions about time or acceptance of new technologies	2.17	1.28
Ability of analyzing and solving situations which you never faced in the past	2.12	1.01
Ability in identifying and correct manufacturing problems	1.65	1.09
Mean	2.20	

Table 6. Levels of various risk management skills in small scale broiler poultry producers.

Risk management skills	Mean	SD
Ability of understanding the fact that risk is sometimes necessary	2.47	1.51
Ability of predicting and developing strategies for facing the dangers condition	1.90	1.39
Ability of managing the financial and production risks	1.60	1.42
Ability of using agricultural insurance schemes properly	1.57	1.23
Ability of managing price risks in buying inputs in poultry production	1.52	1.30
Ability of evaluating the riskiness of a new venture depending on the probability of success and failure	1.50	1.31
Ability of managing price risks in selling of poultry products	1.43	1.38
Ability of maintaining financial reserves for any eventuality in the enterprise	1.28	1.35
Ability of developing contingency plans as a method of dealing with future uncertainties	.85	1.49
Mean	1.58	

involved in rearing the broilers poultry such as feeding, watering and vaccination.

Ten statements were used to measure specific technical skills. The mean and standard deviation of each statement are presented in Table 7. Most of the investigated statements in this area were in the range from moderate to high skill levels. The ability to manage watering system was the most highly possessed skill (M=4.03, SD.82), followed by ability to control density of the poultry birds (M=3.95, SD=.89) and management of the feeding system (M=3.93, SD=.76). However, the respondents indicated that their skills in preparing poultry house before stocking the chicken was the lowest level (M=3.48, SD=1.41.) followed by managing the physical environment (air, adjust the heat, light and humidity) (M= 3.57, SD= 1.05). Preparation of the poultry house before the chicks arrive and managing the physical environment are crucial in broiler production. If these activities are not done properly the producer would experience high mortality of chicks and lose income. The improper preparation of poultry house may attract incidence of pest and diseases while on the other hand, failing to control the environment especially extreme low and high temperatures which can cause very high mortality rate of chicks. Therefore, there is a need to train the producers in these two crucial skills in poultry production. However, the average level of specific technical skills in poultry production operators was moderate to high level (M=3.79) which indicated that the producers are better skilled in this area of farm management skill.

Average Levels of Various Farm Management Skills

In order to rank and compare all the seven farm management skills under study, the average levels of all the farm management skills were determined. The results are presented in Table 8. Results in Table 8 indicated that the level of all the seven skills under study ranged between very low to high (M=1.58-3.79). The average skill-level in the areas of specific technical skills were determined as moderate to high level (M=3.79), decision making skills from low to moderate level (M=2.20), product procurement and marketing skills from low to moderate level (M= 2.13), planning skills from low to moderate level (M= 2.10), production management skills at almost low level (M=2.04), financial management skills very low to low level (M=1.97)

Table 7. Levels of various specific technical skills in small scale broiler poultry producers.

Specific technical skills	Mean	SD
Ability of managing watering system	4.03	.82
Ability of controlling density of the poultry birds	3.95	.89
Ability of managing the feeding system	3.93	.76
Ability of identifying the symptoms of diseases in birds	3.90	.80
Ability of performing the feeding formulation	3.87	.99
Ability of culling the sick chicken	3.82	.98
Ability of managing and develop one-day old chicks	3.77	.98
Ability of controlling the sanitary conditions and health measures	3.62	.85
Ability of managing the physical environment (air, adjust the heat, light and humidity)	3.57	1.05
Ability of preparing hall/ poultry house before stocking the chickens	3.48	1.41
Mean	3.79	

Table 8. Average levels of various farm management skills in small scale broiler poultry producers.

Area of Farm management skills	Mean
Specific technical skills	3.79
Decision making skills	2.20
Product procurement and marketing skills	2.13
Planning skills	2.10
Production management skills	2.04
Financial management skills	1.97
Risk management skills	1.58
Mean	2.14

(M=1.97) and, risk management skills from very low to low level (M= 1.58).

These results in Table 8 indicated that the mean skill-levels for all the areas of farm management skills were below the cutoff point (M≤2.50) except for the specific technical skills in which producers were rated with a moderate to high level of skill (M=3.79). These results indicated that the poultry producers had very low to moderate skill levels in almost all skill areas in poultry production. Results also indicated that the average rating of respondents on farm management skills was low to moderate skill level (M=2.14) which suggested that there is a need to improve the average skill levels of poultry producers in all the areas of poultry farm management except the specific technical skills.

CONCLUSION AND RECOMMENDATIONS

Management skills among broiler producers are important to enable them to face challenges in high competitive business environment of poultry production and therefore this study determined the levels of seven areas of managerial skills in small scale broiler poultry operators in Botswana. The specific technical skills were ranked the highest among the seven farm management skills under study. Findings revealed that broiler producers in the country had skills above the average level only in specific technical skills in poultry production which implied that broiler producers had competencies in rearing and handling the poultry on the ground. The skill levels of broiler producers in the remaining six areas of farm management skills were below average. These six farm management skills were ranked (in their descending order of levels) as decision making skills, product procurement and marketing skills, planning skills, production management skills, accounting and financial management skills and, risk management skills. These results indicated that the poultry producers had very low to moderate skill levels in almost all the skill areas of poultry production. The risk management skills followed by the accounting and financial management skills were the least ranked farm management skill. It

is therefore necessary to improve farmers' risk management skills and accounting and financial management skills on priority basis which can be accomplished through improving on training and extension services to the broilers poultry producers.

The prevailing low level of farm management skills among broiler producers have implications on the productivity and sustainability of broilers poultry production in the country. The low to very low level of skills almost all the areas of farm management can be

Further study should be conducted to determine the influence of various personal, socio-economic characteristics of poultry producers on the level offarm management skills. The findings of such study can help in prioritizing the areas for effective and time bound improvement in managerial skills enhancing the productivity inthe smallscale broiler poultry production in Botswana. Further research can be conducted to determine the influence of farm management skills on the success and failure of the broilers poultry production in Botswana

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one of the major cause of failure or poor performance of the broiler poultry farms in Botswana. Therefore, in order to improve productivity and sustainability of small scale broiler production in the country, it is recommended that the broiler poultry producers should be adequately trained in areas of planning skills, financial management skills, production management skills, product procurement and marketing skills, decision making skills and risk management skills.

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