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THE CHALLENGES AND REMEDIES OF SMALL SCALE BRIOLER PRODUCTION

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ABSTRACT

This survey studied the challenges and remedies of small-scale broiler production in Bali Local Government Area of Taraba State. Respondents were drawn from six wards that make up Bali A, Bali B, Suntai, Maihula, Kaigama and Kusum wards. The respondents were small-scale broiler producers. Two hundred and forty (240) producers were selected through a system of random sampling. Data collected were on constraints and possible remedies associated with small-scale broiler production in the study area. Structured questionnaires where the instrument used for data collection. Analytical tool used were percentages. Therefore, percentages were used to describe the constraints and remedies associated with small-scale broiler production. The result revealed that majority of the respondents on major constraints faced by the producers were not significantly affected in the proportion of 17.5%, 17.1%, 16.7%, 16.2% and 15.8% mostly in disease/pest, mortality, poor quality ingredients, credit/loan, cost of feed and technical know-how. While the major possible solutions to the constraints of small-scale broiler producers, which followed same trend in percentages and ironically invariables. Likewise, the minor constraints of small-scale broiler producers designated proportionally as 17.5%, 17.1% and 16.2% were also not significantly related to one another and to the minor possible solutions of constraints of small-scale broiler producers which government must tackle so as to enhance the commercialization of small-scale broiler industry in Nigeria.

Keyword: Broiler Chickens, Massive Production, Fast growth, Reversing Inadequate Protein.

INTRODUCTION

In Taraba State of Nigeria, the protein sources are mainly poultry, sheep and goat, including cattle mostly in the urban areas. However, other sources of protein are plants especially (legumes) and animal from the wild. Although a few domestic animals like rabbit etc are kept. But these cannot meet up the protein requirements of the body. Inadequate protein intake by most Nigerian diet contains about 7gm/caput/day of animal protein as against the recommend intake of 28gm/caput/day for normal health [1] What is known as poultry farming in Nigeria developed slowly. The Nigeria government in an attempt to alleviate this problem has always resorted to mass importation of meat. The Obasanjo led administration has put more effort towards self-sustainability in poultry production by placing ban on the importation of frozen chicken [2]. The problem which the solution is sought is that of harmonizing or balancing the shortage in supply caused by the ban on importation of frozen chicken. This can only be achieved by increasing poultry production. Also, many Nigerian livestock farmers in their own effort have preferred to invest in the poultry industry making it easy for the transformation of the previous backyard and less efficient system of poultry keeping to a more scientific system, despite their poor capital base (Emaikwu et al. 2011, FAO 2003).

MATERIALS AND METHODS

The Study Area

This study was conducted to ascertain the challenges and remedies of small broiler farmers in six wards of Bali Local Government Area comprises of Bali A, Bali B, Suntai, Machula, Kaigama and Kussum Badakoshi wards. The total sample size for the study was 252 small scale broiler farmers were randomly

selected in each of the six wards of the local government which was also randomly selected because of the small scale broiler farmers in the area. A total sum of 240 questionnaires (sample size) were returned from the famers, out of the 252 distributed. Some of the important variables measured, were:
Constant to increased broiler production was measured with 2-point scale. Major constraint = A, minor constraint = B
Remedies to increased broiler production was also measured with 2-point scale. Major remedy = A, minor remedy = B.

METHOD OF DATA COLLECTION

The researcher collected both primary and secondary data for this research primary data came through the use of structured questionnaires (sample size) and personal observation by the research in collecting such data, the researcher asked the larger and smaller farm holders relevant questions pertaining poultry production. This includes information obtained from inventories such as receipts, farm records, ledgers, production charts, types and sources of input and production cost as well as returns. The secondary data for this survey were gathered from existing findings in form of books, journals, newspaper, magazines, bulleting's project work etc. through literature review.

DATA ANALYSIS

Data collected was subjected to descriptive statistics, frequency and percentages were used to describe data collected.

RESULTS AND DISCUSSION

The result obtained from the survey titled challenges and remedies of small broiler farmers, were presented by tables and subsequent discussion of the results subject to the tables.

TABLE 4.1 Major Constraints to Increase Small Scale Broiler Production

Major Constraints (variables)	No. of Respondents	Percentage
Disease and pest attack	42	17.5
Rate of mortality of the birds	41	17.1
Lack of quality ingredients for Feed formulation	40	16.7
Difficulty in credit and loan Procurement processes	40	16.7
Cost of feed	39	16.2
Lack of technical know-how in handling poultry	38	15.8
Total	**240**	**100**

Source: Field survey (2021)

Table 4:1 above shows that 17:5% of the respondents were faced with diseases and pest attack as a major constraint, this is probably because most of small broiler farmers could not identify the symptoms of the disease outbreak which is a major threat that wipe out many of the poultry in developing countries. Most (17%) of the respondents were also faced with rate of mortality of their broiler was a major constraint to increase their broilers production. This concurs with Chitate and Guta (2001) and Smith (1992) who also observed that mortality was the major constraint to broiler chicken production. Lack of quality ingredient for feed formulation was indicated by 16.7% of the respondents to be a major constraint. Difficulty in credit and loan (16.7%) respondents were also faced with uneasy access to loan and credit procurement; this was in line with reports of Agbato, 1997; Akeeb, 1997, Abebayo

and Adeola (2005), who also confirmed that credit facilities or loans from financial institutions are not accessible to the broiler farmers in the study area. While (16.2%) respondents believed that the high cost of feed for their broiler birds was a major constraint encountered which prevented them from increasing their small-scale broiler production. The high cost of feed could be linked also to the lack of quality ingredient for feed formulation because the available quality ingredient may be costly and thereby affecting the price of the feed. The implication of this is that if the cost of feed is high and small-scale broiler farmers could not afford it then it will affect the number of birds they can keep. Lack of feed for the mother hen and the chicks was the main reason for not confining poultry birds, chick confinement has been known to reduce losses from predators; however, it comes at a cost to the farmers in terms of increased feed (Sonaiya and Swan, 2004). Meanwhile, the least of the major constraints of small-scale broiler production in the study area (15.8%) respondent's lack technical knowledge required in the poultry business, Olaniyi et al (2008) opined that lack of technical knowledge is a major constraint that militates against poultry production.

Table 4.2 Minor Constraint to Increase Small Scale Broiler Production

Minor Constraints (Variables)	No. of Respondents	Percentage
Cost of drugs and vaccination	42	17.5
Market/price fluctuation	41	17.1
Unavailability of land/space	40	16.7
Availability of labour	39	16.2
Purchase of healthy chicks	39	16.2
Packing and disposal of broilers droppings	39	16.2
Total	**240**	**100**

Source: Field survey (2021)

Table 4:2 Above indicated that 17.5% of the small broiler farmers voiced out that there was no stock of drugs at hand which can be used whenever the need arises and they could not follow the routine vaccination programme recommended and lack of professionalism due to their costs, rendering such remedies to be locally unavailable for disease prevention and therapy. Sometimes, the efficacy of the drugs and vaccines are not reliable, maybe because of the misuse of the drugs and vaccines which could cause the development of resistant strains of bacteria on the birds and the validity of the vaccines to be in effective. The 17.1% respondents of the small broiler farmers pointed out that the market for their birds was seasonal when they fetch the maximum price (festival seasons) after which the demand is low and fluctuation in price arises to comparatively low price. The respondents of 16.7% admitted that cost of land and communal land tenure system have contributed immensely as the minor constraints to expand the small-scale broiler farms to a large commercial production. While 16.2% each of the respondent is on (unavailability of labour purchase of healthy chicks and broiler droppings) are some of the minor constraint surroundings their intensively because of high cost of labour, purchase of poor quality chicks not always realized early enough until considerable level of costs has been incurred in raising the chicks. Reddy (1991) observed that there is no strict and compulsory quality control measures either in the hatchery or in the market in most developing countries. Some farmers will not threat their equipment thereby causing negative effect to the birds and improper disposal of broiler dropping causing soil pollution, air pollution and pollution of water resources

Table 4.3: Major Possible Solutions to the Constraint to Increased Small Scale Broiler Production

Possible solutions (Variables)	No. of Respondents	Percentage
Easy access to drugs and vaccines	42	17.5
Credit and loan procurement	41	17.1
Provision of adequate land/space	40	
Provide quality feed ingredients	40	16.7
Stable market price for broilers	40	16.7
Provision of adequate training in handling broilers	39	16.2
Adequate government policy intervention	38	15.8
Total	240	100

Source: Field survey (2020)

Table 4:3 above indicates that the respondents likely major solutions to the various constraints that affect the increase in production of broilers. About 17.5% of the respondents indicated that provision of easy access to drugs/vaccines and loan procurement will proffer solution to the constraints they are facing in increasing small scale broiler production. This is in line with Haruna et al (2007) who pined that small scale broiler farmers do not have adequate capital, drugs/vaccines and resources to expand their scale of operations. Followed by (17.1%) respondents pointed out that provision of adequate land and space for broiler production was suggested, although it is not the most proportion that indicated that provision of land/space will assist in increasing small scale broilers production but it is a vital suggestion because without land poultry farms cannot be established and where it is proposed to be sited close to residential buildings most of the times the residents of such area protest about the location of the poultry farm in the neighborhood. Meanwhile, 16.7% of the respondents indicated that the provision of quality ingredients for broiler feed will proffer solutions to the constraints faced

by farmers. It is probably because many of the small-scale broiler farmers mostly at times purchase feed they utilized for their birds. So, if there is more supply of the quality ingredient for formulation and compounding then the constraint high cost of feed may reduce and the respondents will be able to buy either more of the ingredients for feed to nourish their broiler birds productions. Same proportion of the respondents 16.7% agreed that stable market price for the sale of broiler could also encourage broiler farmers to increase their production since they are assured that they will be able to sell their birds at a good price to the people regardless of season they produce more broiler because there is suitable and stable market price for the sale of the birds. Knowledge and technical know-how in any business is very important so as to able to handle such business properly and efficiently, 16.2% of the respondents indicated that adequate training should be provided so as to educate and enlighten the farmers. At least 15.8% concurred that there should be adequate government policy to support them to boost their small-scale broiler production.

Table 4.4 Minor Possible Solutions to the Constraints to Increased Small Scale Broiler Production

Minor Constraints (Variables)	No. of Respondents	Percentage
High level of education	42	17.5
Quality leadership	41	17.1
Provision of modern resources	40	16.7
Economic factors	40	16.7
Prevention of food poisoning	39	16.2
Prevention of drug residues	38	15.8
Total	240	100

Source: Field survey (2021)

Table 4:4 indicates that 17.5% of the respondents agreed that the level of education determines the speed at which

knowledge and information on new and useful technologies are accessed and adopted. The rate of adoption of new knowledge affects the productivity and efficiency of broiler production. Some 17.1% respondents opted for quality leadership as the role of leadership in small scale broiler farmers is also important. If the leadership is innovative and risk taking, it is easier for extension agencies to make technological improvements in small scale farmers production. Availability of resources and economic factors adopted the same weight of 16.7% respondents who concurred that the availability of laboratories to analyze feed, poultry products, etc, determines the marketability of such products and also the cost and efficiency of production. The input supply systems also need to be geared up to get the maximum pay off in extension.

Lack of transport facilities could lead to establishment of poultry farms near urban areas with high market potential which in turns leads to urbanization. Provision of modern resources could bring about sitting broiler farms in remote areas to avoid urbanization hazards. While economic factors which implies cost factors affect both the processes of technological identification and technological dissemination as suggested by 16.7% of the respondents. The high cost of implementing useful technology is an impediment to its adoption. For instance, in small scale broiler farms, the unit of broiler farms it so low that it makes the cost of using any technology like vaccination, deworming, etc. very high. The high cost of the technologies could be avoided by intensive or maximization of small-scale broiler farmers to large commercial production through the efforts of the farmers and governments. Low proportion of the respondents 16.2% accepted prevention of food poisoning as a minor solution to

increased small scale broiler production. The rational that accompany their logic was that because of the high nutrient value, poultry meat are very important in the diets of human beings. However, they may also act as potential source of food poisoning, primarily because of salmonella infections. Poultry products are highly perishable and improper storage leads to microbial spoilage and consequent food poisoning. Poultry meat is infected from the body system because of diseases, contamination of car cases with gut contents, unhygienic conditions prevailing in the slaughter house and retailing units, long hours of exposure in an open environment at room temperature during display and improper cold-storage conditions.

Legislative controls need to be implemented and educating farmers and the retailers on hygienic measures needed in small scale broiler farmers may also prove helpful. The least suggestion of the respondents 15.8% on minor possible solutions to increased small scale farmers production was centered on prevention of drug residues. The respondents pointed out that the resides of harmful substances in poultry might constitute a threat to human welfare. The conception or misconception of facts on residues will adversely affect the market for these productions. The situation is complicated, because the after effects are not always immediately observable, but have a cumulative effect over a prolonged period. People become overcautious, especially those who are not well informed about the possibility of the residues and their consequences. The presence of residues of antibiotics and antibacterial hormones, beta-agonist, anticoccidials, pesticides, anthelmintic, etc. needs to be controlled through detection by laboratory analyses followed by appropriate

legislative measures. This will aid in preventing related health hazards and also overcoming problems in marketing.

SUMMARY

A survey titled challenges and possible solutions in six wards of. Bali local government area was conducted with mostly structured questionnaires. The result revealed that both the constraints and possible solutions were not significantly affected by percentages (17.5%, 17.1%, 16.7%, 16.25 and 15.8%), meanwhile, some of the reversed constraints faced by the respondents to possible solutions were identified by this study as disease and pest control, easy access to land/credit procurement, stability of market price for the sale of broiler bird, provision of quality feed ingredients, provision of adequate land/space for poultry production, as well as government policy intervention.

RECOMMENDATIONS

It was recommended that small scale broilers producers should be encouraged to form cooperative societies or join the existing one to be able to access loan to their businesses and government could also make fund available to assist the small-scales broiler producers, capacity, training of small scale producers to enable them to cope with the challenges of modern broiler farming and commercialization of small-scale broiler production should be carried out.

CONCLUSIONS

Government should make policies specifically for transformation of the small-scale broiler production. This will assist in removing the challenges of small-scale broiler farms

thereby creating a favorable environment to increase small-scale broiler production among small holder broiler farmers.

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