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Assessment of training needs of poultry farmers in Zaria local government area of Kaduna State, Nigeria

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Abstract

This study assessed the training needs of poultry farmers in Zaria Local Government Area of Kaduna State, Nigeria. The study specifically described the socio-economic characteristics of poultry farmers, identified the training needs by poultry farmers, identified the institutional support enjoyed by poultry farmers, and identified farmers' constraints to poultry production. One-hundred and fifty (150) poultry farmers were used as sample for this study. Interview schedule was used to collect relevant data. Descriptive statistics was used to analyze the data collected. Result obtained shows that farmer have high level of education. Also, proper record keeping was the major training need by poultry farmers while new agricultural technology ranked as the major institutional support enjoyed by the farmers. High cost of input was the major constraints to poultry production in the study area. This paper concluded that poultry farmers need training on adequate record keeping. It recommended agricultural institutions such as government, private organizations and NGOs should support farmers through intensive training and re-training especially on identified areas of needs in order to increase their productivity.

Keywords: Training needs, poultry production, training, improved poultry production technology

Introduction

Nigeria's livestock profile from World Bank (2017) revealed that, the livestock sub-sector has been growing at a rate of 12.7%, higher than agricultural growth rate of 6.8% annually. The subsector is vital to the socio-economic development and key for nutritional security, providing 36.5 percent of the proteins consumed by the populace in Nigeria. Majority of Nigerian livestock owners are the rural poor, and a significant proportion of the urban poor as well, and evidence indicate that livestock development would positively contribute to poverty alleviation. Despite the large herd size, apart from eggs, livestock subsector's production does not meet the current need (Emokaro and Eweka, 2015). The difference between domestic demand and supply is projected to widen in future (World

Bank, 2017). Nigeria currently imports more than 70% of its poultry and 25% of its beef requirement to meet its domestic demand. The Northern region has the largest population of livestock in the country, about 90% of the country's cattle population and 70% of country's the sheep and goat population (World Bank, 2017). On the other hand, poultry is distributed across Nigeria with greater concentration in the southwest and southeast Nigeria. FMARD (2017) estimated the number of poultry in Nigeria at 180 million. While the large commercial holdings are expanding, it is predicted an exponential rise in demand for poultry meat (FAO, 2019). The national demand is of around 1.5 million tonnes of poultry meat and 4 million tonnes of eggs per year (FAO, 2019).

Poultry is reared in Nigeria for economic

and social purpose (Eze and Adeyemi, 2012; Iwena, 2012). The production of egg and chicken bird occupies a prime position for improving animal protein consumption of both rural and urban households which are carried out by person refers to as poultry farmers. The poultry section of livestock subsector is important and rapidly growing as one of the most commercialized agricultural industry in Nigeria due to its ability to retain its value chain and high investment returns (Abubakar and Ibrahim, 2019).

Poultry farmers require training to improve their productivity to be able to carry out their business. According to Dhaka *et al.* (2017) training referred to as the acquisition of skills by a person to gain expertise to be able to perform on act expertly. Training is the process of acquiring specific skills to perform a job better (Issa *et al.*, 2011). In business dictionary, training is referred to an ability and capacity obtained through deliberate systemic and sustained effort to smoothly and adaptively carryout complex activities or job function involving ideas (cognitive training) things, (technical training) and / or people (interpersonal). Ajayi (2015) defined training as the abilities to carry out a task with pre-determined result often within a given amount of time energy or both. A person who has more training must behave differently from a person who has less of it or does not have it at all. Knowledge is essential for proper utilization of genetic stock, available resources, economic information and scientific poultry husbandry practices by the farmers to develop their business successfully and is ultimately linked with the increased socio-economic status (Sharma, 2010). In relevance to this study, training are those abilities required to carry out a task by a poultry farmer to succeed economically especially in the phase of rising demand for poultry products. Thus, this study assessed the training needs of poultry farmers in Zaria Local Government of Kaduna state,

Nigeria.

Training Needs of Poultry Farmers

Owona *et al.* (2010) defined training needs as skill, knowledge and attitude an individual requires in order to overcome problems as well as to avoid creating problem situation. This definition indicates that training is an essential resource, which will direct knowledge and skill towards enhanced production (Adesoji *et al.*, 2006). Identifying training needs often remains the responsibility of outside training operators. It is therefore, characterized by their analysis of the situation (often external) and by the objectives that they are pursuing (often sectorial, almost always determined by their institutional requirements or personal ambitions).

Training is very important for any business or enterprises to be successful in achieving desired goal (Okwoche *et al.*, 2015). Soyemi (2014) speculated that poultry farmers who lack training may not be useful to himself and society. Sonaiya (2011) expressed the need for proper training on management skills and marketing strategies while planning poultry establishment. Newman (2011) emphasized that the main objective of training farmers is to maximize the annual net income sustained over a long time, and enhanced turnover/return on investment which facilitates improvement in the standard of living of the farmers.

Training enables farmers to achieve their objectives in relation to his farm and family in a more organize manner. Also, training enables a careful examination of the existing resources and their best allocation; enhances farmers' decision-making ability; enhances farmers' identification of input and credit needs, as well as estimating future cost and returns.

Sharma (2010) and Sonaiya (2011) identified four (4) different parts of training needs in poultry production. They are planning, management, health, marketing and

processing for the production to be effective.

Planning training needs by poultry farmers:

Corral and Reardon (2010) defined planning as a deliberate attempt by an individual to arrange and document activities in order, before implementing them. The farmer considers certain factors such as farmland and its topography, the animal to be reared, available resources and facilities, and marketing demand for the livestock to be produced in his planning. According to Newman (2011), planning should include decision to go into the business, analysis of strength and weakness in relation to the business, selection of product/services, assessment of potential market share, business selection, preparation of financial, production, and marketing plans. In the opinion of Nworgu (2006) asserted that farm business financial success usually begins with the business planning.

Management training needs by poultry farmers:

Nworgu (2006) stated that management in poultry production usually refers to the husbandry practice or production techniques that help to maximize the efficiency of production. Management practice(s) are very essential to optimize production. Sharma (2010), in his contribution, stated the basic management practice in deep litter system should include provision of sufficient ventilation for birds, provision of good litter materials, keeping appropriate population while keeping the litters dry all the time.

Health maintenance training needs by poultry farmers:

Boice (2005) viewed health in poultry production as presented with the following rules: provide a balance diet and make sure the feed is free from molds and chemical contaminant (that is pickle grain), keep the litter dry. Coccidiosis (an intestinal infection) and worms become a problem with wet litter; provide comfortable environment

(temperature between 10 and 32 degree Celsius), clean out feeder and drinker regularly. Health maintenance and adequate sanitary measure can help in preventing diseases. The author further stated that sick birds can show one or a combination of the following symptoms: off-feed; general inactivity; drop in egg production; diarrhea; loss of condition; nassal/oculars and/or oral discharge; sudden death. Dhaka *et al.* (2017) emphasized quarantine, hygiene and use of preventive vaccination/medication programs including use of suitable monitoring program as important steps on health maintenance skill in poultry production.

Marketing training need by poultry farmers:

Chicken birds are reared and sold in market when mature. Marketing can be viewed as an event usually held at regular intervals, at which people meet for the purpose of buying and selling merchandise. Sharma (2010), marketing involves activities associated with the flow of goods and services from the producer (production) to the consumers. Marketing of poultry product as stated by Iwena (2012) requires specialized skills and professional handling of products to maintain quality for foreign trade.

The demand for poultry product has increased in Zaria Local Government area of Kaduna state as a result of growing population, socialization, alteration in consumption pattern and value preference. Therefore, the present supply of poultry (meat and egg) could not meet the demand of the people. This situation has led to scarcity of the poultry product in Zaria Local Government area of Kaduna State, while the limited qualities available now become very expensive and not affordable by low-income Earners. This situation calls for concerted effort to increase poultry production. It is not clear if poultry farmers have the required training to engender efficiency in production. The Researchers therefore,

believed that if poultry farmers are properly trained on needs in specific areas of preference, productivity will be enhanced to provide sustainable livelihood and contribute meaningfully to economic growth. To our knowledge, no study has investigated the training needs of poultry farmers in Zaria Local Government Area of Kaduna State, Nigeria. This underscores the need for this research.

Objectives of the Study

The main objective of the study was to assess the training needs of poultry Farmers in Zaria Local Government area of Kaduna state, Nigeria. The specific objectives were to:

- i. describe the socio-economic characteristics of the poultry farmers;
- ii. identify the training needs by poultry farmers;
- iii. identify the institutional supports enjoyed by poultry farmers, and
- iv. identify the constraints to poultry production.

Methodology

The study made use of descriptive survey research design. The research work was conducted in Zaria Local Government area of Kaduna state. The population of Kaduna was at 760,084 as of the 2006 Nigerian Census. Rapid urbanization over the past decade has created an increasingly large population, now estimated to be around 1.3million. Zaria is a major city in Kaduna State in northern Nigeria, as well as being a Local Government Area. Formerly known as Zazzau, it was one of the original seven Hausa city-states. Zaria's economy is known for cultivation of staple food such as guinea corn and millet etc. Cash crops grown include cotton, groundnuts and tobacco.

The population of the study was 155 poultry farmers. This list was generated through a reconnaissance survey conducted to

determine the sample frame. Total sampling was used. However, only 150 farmers could be reached for data collection. Data was collected using validated interview schedule administered to farmers who were visited in their homes/farms. Descriptive statistics was used to analyze data collected for this study.

To measure the training needs of poultry farmers, nine (9) training needs were listed on a 4-point Likert-type scale of 'not required', 'somehow required', 'required', and 'highly required' and assigned weight of 1, 2, 3 and 4 respectively. The weighted sum for each source was obtained by multiplying the point scale by the number of respondents in each point scale. Further, the weighted mean score was obtained by dividing the weighted sum (for each source) by the total number of respondents. Any source with a mean score of equal or above the cut-off mean of 2.5 was regarded as required and any mean of lower than 2.5 was regarded as not required.

To measure the institutional supports enjoyed by poultry farmers, thirteen (13) supports were listed on a 4-point Likert-type scale of 'not enjoyed', 'somehow enjoyed', 'enjoyed', and 'much enjoyed' and assigned weight value of 1, 2, 3, and 4 respectively. The weighted sum for each support was obtained by multiplying the point scale by the number of respondents in each point scale. Thereafter, the weighted mean score was obtained by dividing the weighted sum (for each support) by the total number of respondents. Any support with a mean score of equal or above the cut-off mean of 2.5 was regarded as enjoyed while any mean of lower than 2.5 was perceived as not enjoyed.

In the same vein, eleven (11) constraints were listed to measure the seriousness of the constraints to poultry production by poultry farmers. The constraints were listed on a 4-point Likert-type scale of 'not serious', 'somehow serious', 'serious', and 'very serious', and assigned weight value of 1, 2, 3,

and 4, respectively. The weighted sum for each constraint was obtained by multiplying the point scale by the number of respondents in each point scale. Thereafter, the weighted mean score was obtained by dividing the weighted sum (for each constraint) by the total number of respondents. Any constraint with a mean score of equal or above the cut-off mean of 3.0 was regarded as major while any mean of lower than 3.0 was regarded as minor.

Results and Discussion

Socio-Economic Characteristics of the Respondents

Table 1 shows that the mean age of poultry farmers was 48 years. This implies that the younger ones were less involved in village poultry production, a characteristic feature of the nonchalant attitude of youth especially in developing countries. However, there could be some other inherent factors (such as inadequate skill) debarring them from taking to poultry production as a business. This usually leads to underutilization of resources and hence poverty and poor livelihood in rural Africa. Evidence from a study conducted by Suleiman *et al.* (2017) showed that about 53.3% of poultry farmer in Lagos State, Nigeria were above 50 years of age.

Results in Table 1 also show that 72.0% of the respondents were female while 28.0% were male. This indicate that poultry production is dominated by female, which may be attributed to the importance women attached to the wellbeing of household and need for income generating activities Soyemi (2014). Tsojon *et al.* (2016) stated that the higher participation of female in poultry production could be attributed to factors such as lack of time by men. Emokaro and Eweka (2015), however, found that poultry farming is dominated by males in Edo State, Nigeria.

Half (50.0%) of the respondents had tertiary education. This implies that majority of poultry farmers were educated. The high percentage of respondents with formal education may be due to the location of the study area in which educational facilities are easily accessible. Suleiman *et al.* (2017) found similar result. Saleh (2017), who found similar result, reported that educated farmers are more innovative and knowledgeable; therefore, education is expected to have positive association with training needs. Babatunde and Qaim (2010) stated that education is an important factor in assessment training needs by poultry farmers. Exposure to formal education can be regard as vehicle for increasing knowledge about new farming ideas, that is, farmers with some forms of education would know better how to seek information on improved systems of poultry production. However, Elum, Etowa and Chujor (2017) lamented high level of illiteracy among livestock farmers in Rivers State, Nigeria.

Also, the majority (78%) were married while only 22% are single. This implies that poultry production is dominated by married farmers especially women. This finding is in line with the study by Suleiman *et al.* (2017) that the majority of poultry farmers in Kaduna State were married.

Furthermore, 64% of poultry producers reared boilers while only (22%) reared layers. This implies that most of the respondent are good in boiler production while very few are into other breeds. This might be due to preference for meat, yet it could be due to the low capital required for establishment as cost of cages (which is important for egg production) can be avoided. In line with this finding, Sonaiya (2011) reported that meat production is the major purpose of poultry farmers.

Table 1: Distribution of poultry farmers' socio-economic characteristics

Variables	Frequency	%	Mean
Age (years)			48
26-35	21	14.0	
36-45	33	22.0	
Above 45	96	64.0	
Sex			
Male	42	28.0	
Female	108	72.0	
Educational qualification			
Tertiary education	75	50.0	
Secondary education	33	22.0	
Primary education	27	18.0	
Qur'anic education	15	10.0	
Marital status			
Married	117	78.0	
Single	33	22.0	
Breed type			
Boilers	96	64.0	
Layers	33	24.0	
Others	21	14.0	
Annual Income (₦)			101,000
100,000- 150,000	33	46.0	
50,000 - 100,000.	96	34.0	
150,000 and above	21	19.0	
Farming Experience (years)			
1-10	33	22.0	
11-20	96	64.0	
Above 20	21	14.0	
Household size			8
1-5	51	34.0	
6-10	81	54.0	
Above 10	18	12.0	
Extension visit			
Once in 2 weeks	13	8.7	
Once in a month	44	29.3	
Occasionally	21	14.0	
Never	72	48.0	

Source: Field Survey, 2019

Moreover, 46% of the poultry farmers earn ₦100,000 - ₦150, 000, while only 19% of the them earn above ₦150,000. This indicate that poultry production was dominated by middle income earners. This may be due to the type of breed reared and high cost of production that is involves in poultry production. According to Sonaiya (2011), poultry keeping is an

important source of income. The income from the production may seem small, but can be important for the household as they often can decide upon the use of the money generate.

Also, the majority (64%) of the poultry farmers had between 11-20 years' experience in poultry rearing. While 14% had above 20 years of experience. This result implies that

most of the poultry farmers had high experience in poultry rearing. The farmers' years of poultry experience are expected to serve as a guide to know the appropriate training needs by poultry farmers in the study area. Poultry production experiences may also lead to increased production efficiency and may likely result into better understanding of poultry management.

The mean household size of the poultry farmers was 8 persons. This implies that poultry farmers have large household. Olawepo (2010) opined that family size forms the main source of labour supply. Farmers with large family size will probably have less need for hired labour.

Also, most (48%) of poultry farmers were never visited by extension agents. Extension Agent is very important to assist farmer meets his/her occupational needs. They help in creating awareness, highlight on the benefit of improve technology and enlighten farmers on the source of input for sustainable use of technologies. Similar to this result, Olumide-Oyaniji and Ajayi (2019) found that none (100%) of the broiler chicken farmers in Osun State ever had contact with extension agent, while Saleh (2017) found low extension contact among farmers in Northern Nigeria.

Training Needs of Poultry Farmers

Results in Table 2 revealed the poultry farmers' training needs in poultry farming business in the study area. Major areas of training needs identified by the farmers were proper record keeping (\bar{x} =3.04), appropriate stocking density (\bar{x} =3.01), appropriate application of vaccine (\bar{x} =3.01), and produce marketing (\bar{x} =2.92). The weighted mean of 3.04 obtained indicates that poultry farmers lack good knowledge and skill to properly keep record. This could be due to the

technicalities involved in designing different records such as production, feed, sales and input records. However, it could also be due to lackadaisical attitudes of the farmers. Olumide-Oyaniji and Ajayi (2019) also found that broiler chicken farmers highly need training in poultry management. Ajayi (2015), described record keeping as the process of obtaining control over the use of money, goods and services throughout the production process.

Appropriate stocking rate and appropriate application of vaccine/medication to birds was ranked as the second and third major training needs by poultry farmers. The mean of 3.01 obtained indicates that poultry farmers required training on both stocking rate and application of vaccine/ medication to the poultry. No doubt, that application of vaccine requires some level of professionalism which requires some level of training for farmers to be able to choose appropriate drug for specific ailment and to apply it in the right dosage. Inappropriate stocking rate can mar the poultry business due to attendant consequences of over or under-stocking. While over-stocking can result in choking, mortality and spread of diseased as well as encourage vices such as cannibalism; under-stocking results in waste of resources with attendant consequence on income generated. In line with Razzaq *et al.* (2011), Dhaka *et al.* (2017), appropriate stocking rate and appropriate application of vaccine/medication are major management issues that poultry farmers should have good knowledge. In a similar vein, Okeoghene (2013) found low competence in feed formulation among poultry attendants in Delta State, Nigeria, while Kaur *et al.* (2017) and Kumari *et al.* (2015) found medium knowledge about dairy farming among women dairy farmers.

Table 2: Distribution of Training Needs Required by Poultry Farmers

Training needs by poultry farmers	HR	R	SR	NR	Weighted Sum	Weighted Mean	Rank
Proper record keeping	75 (50)	60 (40)	15 (10)	0 (0)	510	3.04	1 st
Appropriate stocking rate	90 (60)	15 (10)	15 (10)	30 (20)	465	3.01	2 nd
Appropriate application of vaccine	75 (50)	45 (30)	15 (10)	0 (0)	465	3.01	3 rd
Produce marketing	42 (28)	84 (56)	9 (6)	0 (0)	438	2.92	4 th
Proper site selection	30 (20)	75 (50)	30 (20)	15 (10)	420	2.08	5 th
Proper skill on debeaking	15 (10)	30 (20)	90 (60)	15 (10)	345	2.03	6 th
Proper skill on deworming	25 (18)	36 (24)	42 (28)	45 (30)	345	2.03	7 th
Provision of acceptable temperature for chicks	0 (0)	30 (20)	105 (70)	15 (10)	315	2.01	8 th
Proper skill on feed formulation & feeding	9 (6)	39 (26)	12 (8)	90 (60)	267	1.78	9 th

Source: Field Survey, 2019

Figures in parenthesis are percentages

NR=Not required, SR=Somehow required, R= required, HR=Highly required

Institutional Supports Enjoyed by Poultry Farmers

Result in Table 3 revealed the institutional support enjoyed by poultry farmers. The overall mean of 1.63 obtained revealed that poultry farmers do not enjoy institutional supports as expected. Access to new agricultural technology in poultry was the only institutional support enjoyed (Mean=2.60). This result could be due to the proximity of the study area to the National Animal Production Research Institute (NAPRI) in Shika which is the only research institute with national mandate for livestock (poultry inclusive). Sonaiya (2011) opined that in order to improve poultry production and rural livelihood, new package of technology should be made available to farmers through efficient training.

Ease (2007) found that the importance or the services of financial institutions in support of poultry farmers is not felt. This could be due to lack awareness of such facilities by the farmers or the high interest rate and/or collateral required. According to Sharma (2010), Prabakran (2007), institutional support is any kind of help that farmer got from different area or people to enhance the productivity of the farm and these supports are

gotten by different agricultural agencies such as agricultural bank, government, extension workers, non-governmental organizations, association of farmers, friend and family. Very often, institutional support is a direct support to the farmers' investment Iwena (2012).

Sharma (2010) stated that the Ministry of Agriculture, Forestry and rural development as a governmental body of Nigeria is responsible for defining and implementing policy for agriculture in the widest sense. Agricultural bank and other banks provide acquisition center for farmer and gives out loans and credit to farmer (Soyemi, 2014). Olawepo (2010) explained the central bank of Nigeria collaborated with agricultural bank and others to provide farmer with finance and other services. Babatunde and Qaim (2010) state that the function of agricultural bank the provision of loans to individual farmers, cooperative societies, limited liability companies, State and Federal Government agencies; financing direct investment in the equity capital of major agricultural and agro-allied industrial ventures; providing guarantees for viable agricultural and agro-allied ventures to enable them raise financing either locally or from abroad; provision of finance for the marketing of

produce for both the domestic and international markets; financing of agro-allied projects including tractor hiring operations and agro-processing.

Furthermore, Eze and Adeyemi (2012) explained that cooperatives society of farmer and NGOs provide an institutional arm for farmers to be organized and work as a unified group. This entails sharing of common resources, such as land, water, tillage and other services. It also facilitates planning with similar production to grow in order to benefit from economies of scale through bulk inputs purchase and group marketing. Agricultural

association of farmers and NGOs are essential for farmers, as they serve to link them with authorities (the Department of Agriculture, and other stakeholders), resources, and information, and provide them with the capacity development needed to improve their productivity (Sonaiya (2011). But in the view of Adepoju and Ajetomobi (2011) farmer's association and NGOs plays a vital role in providing support for farmer such as provision of free agricultural facilities, supply of capital and loan for farmer, provision of feed to farmer, creation of workshops and training, organization of agricultural activities.

Table 3: Distribution of Institutional Supports Enjoyed by Poultry Farmers

Institutional support enjoyed by poultry farmers	ME	E	SE	NE	Weighted Score	Mean	Rank
Access to new agricultural technology	57 (38)	72 (48)	21 (14)	0 (0)	390	2.60	1 st
Provision of feeds	60 (40)	45 (30)	105 (70)	9 (0)	285	1.90	2 nd
Training	90 (60)	45 (30)	15 (10)	0 (0)	280	1.87	3 rd
Provision of vaccine	45 (60)	45 (30)	15 (10)	0 (0)	273	1.82	4 th
Market information	39 (30)	60 (40)	15 (10)	30 (30)	240	1.60	5 th
Credit loan from family/friends	39 (26)	48 (32)	33 (22)	30 (20)	238	1.59	6 th
Provision of advisory services	45 (26)	48 (32)	33 (22)	30 (20)	228	1.52	7 th
Source of capital from leaders	30 (30)	30 (20)	60 (40)	15 (10)	226	1.51	8 th
Provision of Start-up capital	30 (20)	45 (40)	30 (20)	45 (20)	225	1.50	9 th
Administration of vaccine	30 (20)	45 (30)	30 (20)	45 (30)	219	1.46	10 th
Input subsidy	12 (8)	36 (24)	15 (10)	87 (58)	193	1.29	11 th
Provision of formal credit facilities	6 (4)	21 (14)	18 (12)	105 (70)	190	1.27	12 th
Provision of power/energy	0 (0)	18 (12)	6 (4)	126 (84)	192	1.28	13 th

Source: Field Survey, 2019

Figures in parenthesis are percentages

NE=Not enjoyed, SE=Somehow enjoyed, E=Enjoyed, ME=Much enjoyed

Overall Mean=1.63 (Decision: Not enjoyed)

Constraints to Poultry Production

Result in Table 4 revealed that the high cost of inputs (Mean=3.42), inadequate credit facilities (Mean=3.22) and poor power supply (Mean=3.04) were the major constraints encountered by the poultry farmers which affects their productivity. Razzaq et al (2011), Suliman *et al.* (2017) found high cost of inputs as a major constraint of poultry farmers in

Faisalabad and Nigeria, respectively. This may be one of the reasons majority of the poultry farmers were producing at small scale level. Newman (2011) opined that access to credit gives famers a greater economic role in decision making.

Inadequate credit facilities ranked as the second most severe constraint encountered by

the poultry farmers. The mean 3.22 indicate that most of respondent are constrained by inadequate credit facilities leading to poor production, management and low income. Ukudoh and Oluwafemi (2009), described agricultural credit facilities as the process of obtaining control over the use of money, goods and services in the present in exchange for a

promise to repay at a future date.

Poor power supply ranked third amongst the constraints to poultry production. This result corroborates the findings by Sharma (2010) who found inappropriate farm technology, poor power and energy supply as other major constraints.

Table 4: Distribution of Constraints to Poultry Production

Constraints to poultry production	VS	S	SS	NS	Weighted Sum	Weighted Mean
High cost of inputs	78 (52)	57 (38)	15 (10)	0 (0)	513	3.24
Inadequate credit facilities	72 (48)	45 (30)	27 (18)	6 (4)	483	3.22
Poor power supply	75 (50)	60 (40)	15 (10)	0 (0)	510	3.05
Inadequate extensions agent	60 (40)	75 (50)	15 (10)	0 (0)	525	3.04
Poor skills in crossbreeding	90 (40)	15 (50)	15 (10)	30 (20)	345	3.01
Prevalence of parasites	12 (8)	30 (20)	33 (38)	30 (34)	366	2.44
High cost of transportation due to bad roads	9 (6)	60 (40)	21 (14)	60 (40)	318	2.12
Poor brooding facilities and skill	30 (20)	60 (40)	30 (20)	30 (20)	390	2.06
Inadequate farm technology	27 (18)	30 (20)	18 (12)	75 (50)	309	2.06
Scarcity of input	12 (8)	36 (24)	15 (10)	87 (58)	267	1.78
Adulteration of agrochemical	6 (4)	21 (14)	18 (12)	105 (70)	228	1.52

Source: Field Survey, 2019

Figures in parenthesis are percentages

NS=Not serious, SS=Somehow serious, S= serious, VS=Very serious

Conclusion and Recommendations

Poultry farmers in the study area lacks adequate training required to ensure efficient and profitable poultry business. Also, the level of institutional support for poultry business is low. Hence, efficient poultry production is unrealistic due to myriads of constraints.

Due to these conclusions, this study strongly recommends the following:

- i. Extension efforts should be geared towards encouraging farmers to sponsor training workshops and seminars by inviting resource persons to address their areas of poultry production training needs.
- ii. Programs such as e-wallet whereby mobile phone is used to make up for the

shortage of workforce in the extension service delivery should be re-introduced to ensure adequate supply of inputs to poultry farmers.

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