

The Effects of Poultry Farming on the Socio-Economic Development of Women in Rural Areas: A Case of Bichi Local Government Area of Kano State, Nigeria

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Abstract The paper is all about the impact of smallholder farmer's production of local chicken on economic development of Nigeria basing on the case study of Bichi Local Government of Kano State in Nigeria. The specific objectives of the study which are to identify the challenges faced by farmers in conducting the activity of chicken production and to provide a solution to the challenges faced by poultry farming on socio-economic development in Bichi Local Government of Kano State in Nigeria. The paper applied a descriptive research design in the study to ensure effective collection of data from the respondents. During sample procedures, the researcher selected 120 people who were considered as respondents and these were categorized as follows; 60 Farmers, 40 Business people and 20 were Agricultural officials who are conducting their businesses and stay in the area of Bichi Local Government of Kano State in Nigeria. Both Purposive sampling and simple random sampling techniques were applied during data collection in acquiring data from the participants, Data instruments used includes Questionnaires, Observations and Interview guide, in doing so, the researcher drafted questions which were distributed to the respondents to fill in their opinions and consents about the study. Data analysis was done using statistical package for social sciences and Microsoft excel as data packages in processing

and analysis of data collected from the respondents. Findings from responses shows that several challenges affecting local chicken production where identified such as inadequate resources, diseases, lack of expertise, poor markets among others were identified during data collection.

Keywords: Poultry farming, Local chicken, Chicken Production.

1. Introduction/Background

Poultry farming may be refer to as an economic opportunity of which farmers can learn easily the entrepreneurial skills required for improving and making local chicken keeping in supporting reliable source for income generation and household food security.

Poultry is a business that women are engaged in, especially in Bichi local government of Kano state Nigeria. Many have found in the business to be profitable and wished to expand their flock size but are constrained by lack of capital, diseases and lack of training. There has been a provision of accessible capital to those women either through loans from banks or other cooperative societies from the poverty alleviation program as well as through agriculture funding agencies Ahmed et al (2010).

As poultry production provides an affordable dietary item of a good quality for consumers and profit for producers. Additionally it generates up and downstream investment opportunities and it contributes to the development of the local economy. Therefore, one can say that it clearly meets first two dimensions (economic and socio) of sustainability.

Adeola, (2008), posts: that “poultry industry will not threaten the environment only if both economically and environmentally acceptable management practices are applied”. However, this has not been completely achieved due inadequate resources such as capital which could support this activity to the best level, some farmers in Bichi Local Government of Kano State in Nigeria are faced with inadequate

3. Research Questions

- What are the challenges faced by farmers in conducting the activity of chicken production?
- What are the solutions to the challenges faced by poultry farming on socio-economic development in Bichi Local Government of Kano State, Nigeria?

4. Literature Review

Rural life in Bichi is a Local Government Area in Kano State Nigeria is similar to that in many other developing countries. The rural poor survive by various forms of subsistence farming. The only livestock enterprise available to all farming families, even the poorest, is poultry production (Msami, 2010). Throughout the developing world, local chickens, scavenge for survival, their diets sometimes supplemented by household scraps. Under most forms of management these chickens are not very productive, but every egg and every chicken that becomes available for consumption or sale is a benefit to the owner and produced at minimal cost. Many international organizations and veterinarians are now becoming interested in potential productivity of village chickens. The causes of low productivity are being defined and suitable interventions are being designed (Gueye, 2011).

capital in running the activity of keeping chicken since it involves a number of activities such as vaccination, feeding, shelter among others and all these requires a lot of money to support all these activities, thus antagonizing their job to be done effectively.

2. Specific objectives

- to identify the challenges faced by farmers in conducting the activity of chicken production and
- to provide a solution to the challenges faced by poultry farming on socio-economic development in Bichi Local Government of Kano State in Nigeria.

Local chicken may simply means a small-scale poultry keeping by households using family labor and wherever possible, locally available feed resources. The poultry may range freely in the household compound and find much of own food, getting supplementary amounts from the householder.

Fao,(2013) opined that “Local poultry was additionally clarified as small flocks managed by individual farm families in order to obtain food security, income and gainful employment for women and children”.

Local chicken keeping is quite distinct from medium to large-scale commercial poultry farming. Local poultry is rarely the sole means of livelihood for the household family. It is integrated and complementary farming activities contributing to the overall well-being of the household. Poultry provide a major income-generating activity from the sale of birds and eggs. Occasional consumption provides a valuable source of protein in the diet (Wuni, 2014). Poultry has also played role socio-cultural effects in many societies. Poultry keeping uses family labor, and women (who often own as well as look after the family flock) are major beneficiaries. Women often have effects in the development of local poultry production as extension works and in vaccination programs.

5. Challenges faced by poultry farmers in chicken production

Chicken loss is one of the major problems facing the farmers in conducting the activities of local chicken production in Bichi local government area of Kano state. In this vein, Minga *et al.* (2009), opined that “it was reported that the main cause of chicken loss during chick hood and averaging 50% are due to chicken diseases, predators and theft”. Chicken loss during adulthood is also mainly due to diseases, especially Newcastle disease. Various important poultry diseases can be vaccinated against, including Newcastle Disease, Infectious Bronchitis, Marek’s Disease and Fowl Pox. Other diseases such as Coccidiosis can be protected against using suitable drugs. However, in many cases farmers have failed to control these due to inability to use vaccination and poor housing.

Previous studies (D.A.N.I.D.A, 2012) have indicated that properly designed and built housing for village chickens protects them from bad weather and predators, and if houses are easy to clean, diseases are less likely to occur. Housing for village hens contains some good points about design, in areas where farmers had better knowledge on chicken housing proved to have increasing numbers of chickens.

Moreover, Abu, G. A, I. U. *et al* (2011) Lamented that: “Disease, you can look for mites (which cause scaly leg) by checking the roosting bars at night when they climb up your hens’ legs. Other culprits are infectious diseases and parasites. Keeping the coop relatively clean and using diatomaceous earth (DE) in the nesting boxes and corners of the coop will keep pests under control. Picking up manure daily from the run will help manage contamination and re-exposure to environmental contaminants”.

More so, the industry is faced with many obstacles, to mention but few: Water, Electricity and Disease Control Problems, High Production Cost and Low Return, Limited Access to the Core Markets, Constraints to poultry consumption, Heat stress, agricultural credit, Omission of Feed Ingredients, Management Mistakes, High environmental temperatures and Diseases. Hall, T. (2006), Opined that: “Water, Electricity and Disease Control Problems”.

These are the problems faced by the poultry industry in his perception. The sector faces a number of issues and difficulties including water, food, electricity and other major problems.

In addition to the challenges posed by the various pathogenic diseases, the farmers also face the problem for low capital. Help from the side of the government and other investment institutions, is all that is needed by them for ensuring health growth and development conditions for the domesticated animals. And most of the farmers of the third world countries are forced to sale their products at low costs to the suppliers, which in turn earn some large profits from them.

But, Dolberg, F. (2013) Lamented that: “Limited Access to the Core Markets” is the major problem of the industry. It is all because of the limited access to the worldwide markets which is barrier in the way of these farmers. As they get little return on what they sale, so they never try to improve the quality of the poultry products and farms. Various significant improvements can be made in these production systems through the use and implementation of the most advanced and scientific practices.

A productive resource such as agricultural credit is very vital for efficient and sustainable production activities especially in developing countries (Nweke, 2001). Farm credit is among the essential factors needed for agricultural production, and with it, farmers can secure farm inputs such as; farm equipment and hired labor (Odoh, et al., 2009). Farm credit is widely recognized as one of the intermediating factors between adoptions of farm technologies and increased farm income among rural farmers in Nigeria (Omonona et al., 2008, Akpan et al., 2013). Agricultural credit is seen as an undertaking by individual farmers or farm operators to borrow capital from intermediaries for farm operations (Odoh, et al. 2009). According to Olayemi (2008), credit involves all advances released for farmers' use, to satisfy farm needs at the appropriate time with a view to refunding it later. Thus, credit can be in the form of cash or kind, obtained either from formal, semi-formal or informal sources. Lack of this

credit to the farmers in Bichi local government hindered them from making a huge economic production of the local chicken. Adebayo O. O, (2008). Omission of Feed Ingredients; Sodium is an essential nutrient, playing a major effects in maintaining body fluid volume, blood pH, and proper osmotic relationships. A continuously low intake of salt can cause a loss of appetite. Sodium deficiencies adversely affect utilization of dietary protein and energy, and interfere with reproductive performance. Chlorine is also an essential nutrient. Hydrogen chloride (HCl) released from the true stomach (proventriculus) is important in digestion. Chlorine also plays role in maintaining osmotic balance in body fluids. Birds deficient in chlorine are more nervous, showing increased sensitivity to sudden noise. Be sure that all the birds have access to an adequate supply of a complete feed which meets all their nutritional requirements. Feed stored on the farm longer than two weeks may become moldy. If feed becomes wet it should be discarded. In addition, vitamin potency decreases with prolonged storage.

Again in the motive, Ocholi. (2011) is of the view that high environmental temperatures pose severe problems for all types of poultry. Feed consumption, egg production, egg size, and hatchability are all adversely affected under conditions of severe heat stress. Shade, ventilation, and a plentiful supply of cool water help reduce the adverse effects of heat stress.

6. Solutions to the challenges faced by poultry farmers on socio-economic development

However, with all the above afore mentioned obstacles there are ways of coming out of the menace of poultry farming, especially in Kano state Nigeria. The strategies are as follow: - Technical training and assistance for the farmers, provision of agricultural credit, going organic and free range, understanding chicken nutrition.

In order to solve the issues, specialized poultry networks and training programs should be introduced in order to provide awareness to the famers about the various diseases, health conditions, strategies and techniques which are necessary to ensure the quality of poultry

products and for the better health of the chickens, ducks and other domesticated animals. The poultry producers in Bichi local government area of Kano state, are the ones faced with most number of challenges in comparison to the ones in other parts of Nigeria.

Furthermore, the poultry sectors in Nigeria especially Bichi local government should be given due attention by the agricultural policy makers and scientists. Unfortunately, small scale poultry farms are not given due regards by the researchers. It is all because of the fact that these researchers find no sort of political significance in working in some of the underdeveloped and backward areas of Ngeria. In order to ensure the betterment for all, policy makers and poultry tycoons should take some measures for changing the lives of the poultry farmers in the developing countries. The poultry producers should also change their attitudes and efforts in managing the quality of the products and the welfare of all the animals on their farms.

Adding table scraps and other treats, such as scratch, does change the overall composition of the chicken's diet, altering the proportion of protein and other nutrients, and potentially causing hens to become overweight. It probably makes sense for the new chicken keeper to buy a commercially prepared bulk feed and take the guess-work out of it. (Kouakou K. D., 1997). Both regular and organic layer feeds have 15%-18% protein, and an all-purpose feed will have 16% protein (suitable for birds at least 20 weeks of age). The amino acid methionine is essential (meaning the chicken must get it from feed because it can't be synthesized by the bird) and is the most commonly deficient nutrient. Brown egg layers need more methionine than white egg layers, and the minimum supply in the feed should be about 0.3%. Plant proteins (such as soybeans) do provide methionine, but those who want to avoid soy-based feed due to GMO concerns will need to rely on synthetic methionine. Natural sources of methionine include fishmeal, earthworms, and insects, which free-range hens may find (but which can also contain parasites). Because it is so hard to supply enough organic sources of methionine without oversupplying protein, the USDA's National Organic Program approved the use of

synthetic methionine for organic farmers in 2010.

7. Conclusions

In order to solve the issues, specialized poultry networks and training programs should be introduced in order to provide awareness to the farmers about the various diseases, health conditions, strategies and techniques which are necessary to ensure the quality of poultry products and for the better health of the chickens, ducks and other domesticated animals. The government should provide credit facilities in-terms of loans at low interest rate to the farmers so as to foster them conduct effective local chicken production within the country especially Bichi Local Government of Kano State in Nigeria State, this helps farmers in purchasing the required inputs such as food, water, paying workers, chicks among others, thus boosting the work of chicken production in the country. The government should put much effort in training and sensitizing farmers about the proper and effective ways of conducting the activity of chicken production within the area of Bichi Local Government of Kano State of Nigeria. The government should inject funds in extending infrastructure such as roads for easy movement and transportation firms' input and output to the market centers, electric extension, and water supply extension among others so as to facilitate to work of farmers in conducting chicken production in Bichi Local Government of Kano State of Nigeria.

References

- Abu, G. A, I. U. Odoemenem and A. Oholi. (2011). Determining optimum farm credit need of small scale farmers in Benue State. *Journal of Economics and International Finance* Vol. 3 (10), pp.564–570. Adebayo O. O, Adeola R.G., (2008). Sources and uses of agricultural credit by small scale farmer's in Surulere Local Government Area of Oyo State. *Anthropologist*, 10(4): 313-314.
- Adebayo Oyefunke Olayemi(2012): "Effects of Family Size on Household Food Security in Osun State, Nigeria", *Asian Journal of Agriculture and Rural Development*, Vol. 2, No. 2, pp. 136-141
- Adeola. A Adedeji, RT Ako,(2008): Towards achieving the United Nations' Millennium Development Goals: The imperative of reforming water pollution control and waste management laws in Nigeria *Ahmad, A. and Menezes, J., (2010): Binding of Epstein-Barr virus to human platelets causes the release of transforming growth factor-β1. J. Immunol. 159, 3984-3988.*
- Akpan, S. B., Inimfon V. P., Samuel J. U., Edem A. O., and Uwemedimo E. O. (2013). Determinants of Credit Access and Demand among Poultry Farmers in Akwa Ibom State, Nigeria. *American Journal of Experimental Agriculture*, 3(2): 293-307.
- Danida (2012) <http://www.nrt-kenya.org/>
- Dolberg, F. (2013), Review of Household Poultry Production as a Tool in Poverty Reduction with Focus on Bangladesh and India. FAO, Pro-Poor Livestock Policy Initiative, working paper No.6.
- FAO, (2010), Village Chicken Production Systems in Rural Africa: Household Food Security and Gender Issues. Animal production and health paper No.142. Gueye, E.F. (2011), The Effects of Family Poultry in Poverty Alleviation and Food Security Promotion of Gender Equality in Rural Africa.
- Hall Wines (2006) 'Kathryn Hall' Cabernet Sauvignon, Napa Valley, USA Minga, U.M. (2009), Overview of poultry Production in Nigeria, Paper presented at the Regional Poultry Workshop held at Hotel Impala Arusha 11th – 12th October 2014 Ministry of Agriculture and Cooperatives – National Sample Census of Agriculture 2009.14 Report Volume II.
- Msami, H. M, (2012), An Assessment of Effects of Selected Intervention on the Production of Family Poultry in Nigeria. Research Paper presented at 3Research Coordination Meeting of the Coordinated Research Project at Quatre Bornes, Mauritius.

- N.O.P.(2010) " *National Organic Program Strategic Plan 2015-2018.*" Agricultural Marketing Service.
- Nweke, N. O. (2001). Farming in Rural Areas. Satellite Newspapers. Office of Human Resources and Development. Pp. 25-31.
- Odoh, N. E., Nwibo, S. U and Odom, C. N. (2009) Analysis Of Gender Accessibility Of Credit By Smallholder Cassava Farmers In Afikpo-North Local Government Area Of Ebonyi State. Nigeria Continental J. Agricultural Economics,3: 61 –6
- Oshagbemi, T. & Ocholi, S.A. (2006) Leadership styles and behavior profiles of managers. Journal of Development, 25(8), 748-762.
- Wuni Dasori (2014) Emergency Food Security and Market Assessment in Ghana