



REVIEW ARTICLE

A REVIEW ON POULTRY POPULATION, PRODUCTION (Egg and meat) AND DISTRIBUTION IN NEPAL

Roshan Kumar Yadav^a, Rabindra Yadav^b

^aAgriculture and Forestry University, Chitwan, Nepal

^bInstitute of Agriculture and Animal Science, Paklihawa, Nepal

*Corresponding Author E- mail: prideagriculture9876@gmail.com

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ABSTRACT

Poultry farming is integral part of agriculture in Nepal which accounts about 3.5% of total Gross Domestic Product (GDP). This review was done to study the population ,production (egg and meat) and distribution of poultry in Nepal. In order to meet the demand of poultry produce, the commercial poultry population has increased about more than double the last decade. The recent data of 2018/19 shows the total number of laying hens and ducks are 12.52 million and 0.19 million respectively whereas total chicks production of Broilers, Layers and kuroilers are 25-30($\times 10^6$), 1.5-1.75($\times 10^6$) and 2.5-3($\times 10^6$) respectively with breeder stock population of 2 million birds. Likewise, the total hen egg and duck egg are 1534.68 million and 15 million respectively. Also the total chicken and duck meat is 62899 MT and 353 MT respectively. In Nepal, the national poultry flock includes chickens, ducks, pigeons and other birds that are kept in different production system. Chitwan, Kathmandu and Kaski are major districts with higher number of poultry farms followed by rural people which is under the free range system and low input. The higher number of poultry is concentrated in hill region followed by terai and mountain region. Conversely, the population of duck is higher in terai followed by hill and mountain region.

KEYWORDS

Poultry, Nepal, Production, Distribution, Chicken.

1. INTRODUCTION

Agriculture is the main profession in the context of Nepal and major sector of Nepalese economy. Nepal has two- third of population directly engaged in agriculture contributing almost 34% of National GDP (Gross Domestic product) of which 15% is from livestock sector (MOAC, 2014). The poultry sector alone contributes about 3.5% of the TGDP (CBS, 2012). Nepal is one of the highest percentages of Asian Livestock (livestock and poultry, 5.8 per family) and is 70% of the population rearing some type of Livestock (FAO, 2009). Nepal has varied land topography and climate where poultry farming exists in all the regions in small number due to small land holdings (Pradhanang et al., 2015). The indigenous poultry is widely prevalent which alone accounts about 55% of total poultry population (Ministry of livestock development, 2015; Status of Backyard poultry in Nepal, 2011). The hen and duck population in Nepal is about 75.70 million and 0.41 million respectively with 12.52 million laying hen yielding 1534 million eggs and 0.19 million laying duck yielding 15 million eggs (Statistical Information on Nepalese Agriculture 2075/2076, 2018/2019). The meat production from hen and duck is 62899mt and 353mt respectively. Chitwan, Kathmandu and Kaski are the major districts with higher number of poultry farms in Nepal (MOAC, 2014). This review was aimed to study the population, production (Egg and Meat) and distribution of poultry in Nepal.

2. METHODOLOGY

This review is solely based on the secondary data collected from different relevant research papers, annual progress reports, statistical year books, articles and magazines. The relevant informations were gathered, compiled and elaborated in this review work.

3. RESULTS AND DISCUSSION

3.1 Scenario of poultry business in Nepal

Nepal stands at 112th and 92nd position in chicken and egg production ranking in the world (FAO, 2014). The investment in poultry business has grown to NRs 33.72 billion (The Kathmandu post, 2016). Nepal has no history of export but recently it has started exporting broilers/ eggs to Bhutan. There are ample evidence of informal trade of local, broiler live chickens, eggs and dressed chickens from India in cross- border districts. The demand of poultry meat per day is around 150000 kg per day. According to NHIA (2008) total chicks production of Broilers, Layers and kuroilers are 25-30($\times 10^6$), 1.5-1.75($\times 10^6$) and 2.5-3($\times 10^6$) respectively with breeder stock population of 2 million birds. About Nepal Egg Industry, total commercial brown layers population is 3.5 million with total egg production of 2.9 million per day with an average of 200-300 eggs per bird.

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3.2 National Poultry Population

The national population of poultry has gradually increased from 21.34 million in 2002 to 75.70 million in 2018/19; except in 2005 and 2009. However the duck population decreased from 0.41 million in 2002 to 0.38 million in 2012 and again rose to 0.416 million in 2016. Similarly, the numbers of layer hens consistently increased from 6.68 million in 2003/04, 12.35 million in 2015/16 and 12.52 million in 2018/19. Conversely, the duck layer population experienced a decrease from 0.21 million in 2003/04 to 0.18 million in 2015/16 which again raised to 0.19 million in 2018/19. Number of pigeons and other birds were reported to be 1845234 and 57313 respectively (Statistical Information on Nepalese Agriculture 2075/2076, 2018/2019).

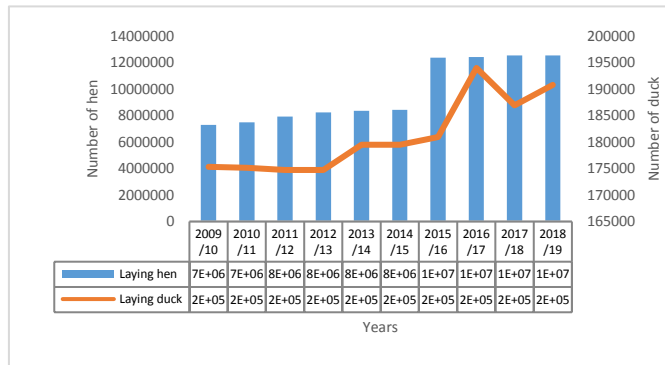


Figure 1: Population of poultry in Nepal over different years

(Source: Statistical Information on Nepalese Agriculture 2075/2076 [2018/2019] Ministry Of Agriculture & Livestock development Planning & Development Cooperation Coordination division statistics And Analysis section Singha Durbar, Kathmandu, Nepal)

3.3 Poultry Production (Meat and Egg)

The chicken meat production has increased from 15881mt in 2003/04 to 62899 MT in 2018/19. The duck meat production was almost stable during the same period but the production has increased to 353 MT in 2018/19 (Statistical Information on Nepalese Agriculture 2075/2076, 2018/2019).

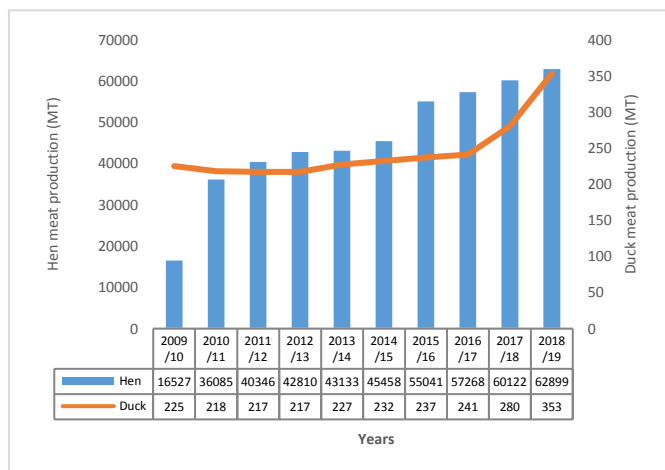


Figure 2: Poultry Meat Production over the years in Nepal

(Source: Statistical Information on Nepalese Agriculture 2075/2076 [2018/2019] Ministry Of Agriculture & Livestock development Planning & Development Cooperation Coordination division statistics And Analysis section Singha Durbar, Kathmandu, Nepal)

Hen egg production showed a drastic increase from about 560 million in 2003/04 to 1534.68 million in 2018/19. Duck egg production decreased from 15.53 million in 2003/04 to 13.06 million in 2010/11 which again achieved 15 million in 2018/19. So the total egg production in 2018/19 is 1549 million (Statistical Information on Nepalese Agriculture 2075/2076, 2018/2019). Average annual growth rate of hen egg production has been 2.43% during last ten years (Osti et al., 2016).

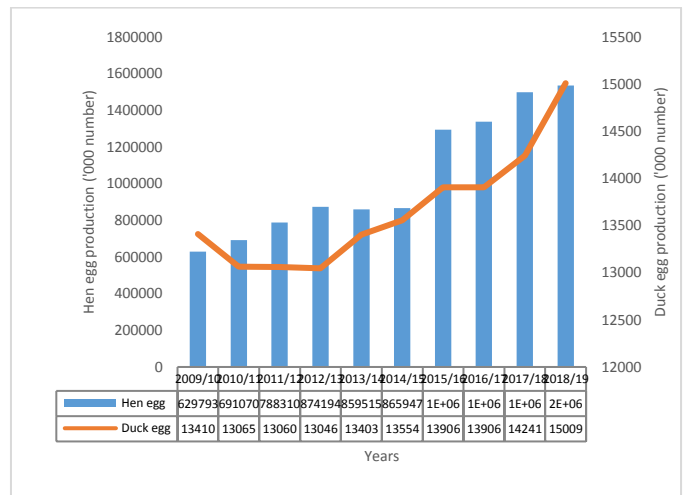


Figure 3: Poultry Egg Production over the years in Nepal

(Source: Statistical Information on Nepalese Agriculture 2075/2076 [2018/2019] Ministry of Agriculture & Livestock development Planning & Development Cooperation Coordination division statistics And Analysis section SinghaDurbar, Kathmandu, Nepal)

3.4 Distribution

The population of chickens is higher in hilly region followed by terai and mountain region whereas the population of ducks is higher in terai region which is about 72% followed by hilly and mountain region (Dhakal et al., 2019). The population of ducks in terai is greater due to the presence of many ponds, rivers and estuaries. Also the demand of ducks is higher due to the residence of Rajbanshi people in terai region who offer them during Siruwa festival (Statistical Information on Nepalese Agriculture 2075/2076, 2018/2019).

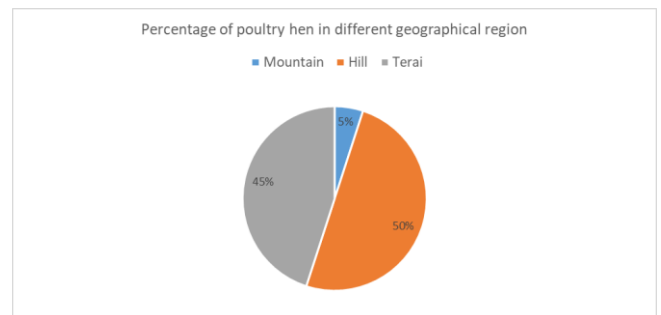


Figure 4: Distribution of poultry (hen) by physiographic region. (Source: Statistical information on Nepalese Agriculture 2010/11)

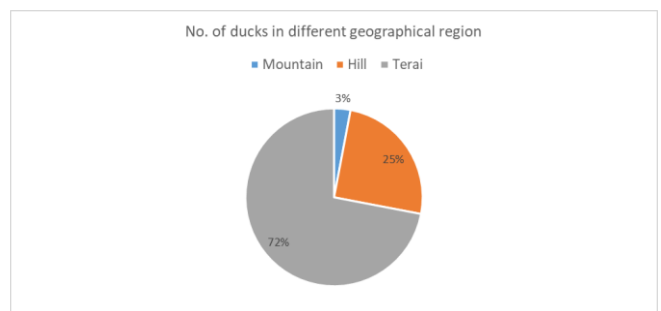


Figure 5: Distribution of poultry (duck) by physiographic region (Source: Statistical information on Nepalese Agriculture 2010/11)

The demand of poultry meat and eggs is increasing at the annual rate of 25% and 10% respectively in urban areas but the annual growth rate of poultry is only 2.38% (Acharya et al., 2015). The products of poultry (egg and meat) have always been playing in uplifting the life standard of small holders and total GDP of the country. This is a sector flourished with spontaneous private sector initiatives on investments, market exploration and expansion. According to Dr. Tilchandra Bhattarai, a poultry researcher "Lower cost coupled with nutritional value of poultry products and their growing popularity among consumers has unleashed a huge potential for business expansion across the country.

4. CONCLUSION

Poultry business is one of the major agricultural practices in Nepal. Poultry production is moving towards self-sufficiency and the growth rate of Nepal's commercial sector is satisfactory at around 17-18% annually. Poultry meat and egg is gaining popularity among the population without regard of caste/ creed/ age, being one of the cheapest sources of protein. So, one can conclude that if stakeholders in the value chain succeed to reduce the effects of disease and ensure the supply of quality poultry and poultry products at reasonable price, the demand will significantly increase in the days to come and hence the poultry population and production.

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