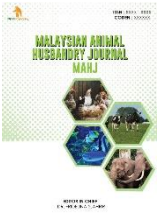
ZIBELINE INTERNATIONAL™ PUBLISHING
ISSN: 2805-5500 (Online)
CODEN: MAHJAQ

Malaysian Animal Husbandry Journal
(MAHJ)

DOI: http://doi.org/10.26480/mahj.02.2023.108.110



REVIEW ARTICLE

A REVIEW ON AN ECONOMIC ANALYSIS OF POULTRY MEAT PRODUCTION IN NEPAL

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ARTICLE DETAILS

Article History:

Received 11 June 2023
Revised 15 August 2023
Accepted 23 September 2023
Available online 26 September 2023

ABSTRACT

Poultry meat is one of the dynamic Agriculture subsector in Nepal which accounts about 4% 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 production has increased about more than double the last decade. Nepal lies at 112th position for chicken meat production of world, which is at the 92nd for egg production in world. The recent data of 2021/22 shows the poultry meat production is 65,387 tonnes growing at an average annual rate of 6.60%. The cost of production includes variable cost and fixed cost, Various investment patterns in farms their respective values and worked out the level of significance was analyzed. The analysis of net return was differed significantly with farm size with higher net return in large farm so that the result reveal that large farm has higher mass of meat production and lower feed conversion rate indicating higher profit margin with enlarge in farm size. it was concluded that the poultry Meat producing farms are profitable and they possesses high growth potentials which are achievable through increased investment and proper management of identified constraints and recommended that broiler farmers should increase their flock size, develop the skills of record keeping and feed formulation to reduce feed cost.

KEYWORDS

Analysis, Distribution, Economic, Nepal, Poultry

1. INTRODUCTION

Agriculture remains the pillar of the Nepalese economy for growth, development, contribution to GDP, employment, income generation and poverty alleviation. According to FAO livestock contributes about 20 to 24% of agriculture domestic product (Poudel et al., 2020; FAO, 2020). Poultry meat is one of the important source of protein in under developed countries like Nepal. In Nepal poultry contributes 4% of Gross Domestic product (Neupane and Kaphle, 2019). Egg and meat production, fertility and hatchability are important reproductive trait that determine the success of any poultry industry (Islam et al., 2002). Poultry production is the quickest ways for a rapid increase in protein supply in the shortest run. The gap between demand and supply for animal protein intake is so high. The FAO recommends that the minimum protein intake by average person should be 65 gm/day; of this 36 gm should appear from animal source (FAO 2009). So poultry meat is good source of protein which is important for growth and development, and other nutrient our body needs, such as iodine iron, zinc and vitamin B12.

Poultry farming can be good source of supplementary farm income. Not only egg and meat, but also poultry manure, a by-product of poultry which is generally considered to be richer in plant nutrient than manure from any other animal source. Poultry farming has become most dynamic part of livestock and has taken the position of one of the biggest industries in Nepal (Fowler et al, 2021). Nepal lies at 112th position for chicken meat production of world, which is at the 92nd for egg production in world. The grandparent stock for the poultry was established by Cobb Nepal with start of production from September 2013. The total production of broiler is 1170573 and layer chicken per week is 118208. The total feed production is 646845 tonnes in 2010/2011 and demand of poultry meat per day is around 150000kg/day (Dhakal et al, 2019).

2. METHODOLOGY

This review is based on the secondary data collected from different relevant research paper, statistical year book, article, magazines and annual progress reports. The relevant information were gathered, compiled and elaborated in this review work.

3. RESULT AND DISCUSSION

3.1 Scenario of poultry production in Nepal

Nepal lies at 112th position for chicken meat production of world , which is at the 92nd for egg production in world. In 2020, production of poultry meat for Nepal was 65,387 tonnes. Production of poultry meat of Nepal increased from 4,315 tonnes in 1971 to 65,387 tonnes in 2020 growing at an average annual rate of 6.60% .

Quick Response Code	Access this article online	
	Website: www.mahj.org.my	DOI: 10.26480/mahj.02.2023.108.110

Cite The Article: Suman Adhikari, Prakash Awasthi, Sujan Bogati, Smriti Singh (2023). A Review on An Economic Analysis of Poultry Meat Production in Nepal. *Malaysian Animal Husbandry Journal, 3(2): 108-110.*

Table 1: Poultry Meat Production in Nepal

DATE	VALUE	CHANGE (%)
2020	65,387	3.38 %
2019	63,251	4.72 %
2018	60,402	5.03 %
2017	57,509	4.04 %
2016	55,278	20.98 %
2015	45,690	5.37 %
2014	43,360	0.77 %
2013	43,027	6.07 %
2012	40,563	11.73 %
2011	36,303	116.71 %
2010	16,752	-0.81 %
2009	16,888	

(Source: Statistical information on Nepalese Agriculture 2076/2077(2019/2020) Ministry of Agriculture and Livestock development planning and development cooperation).

3.2 Economic Aspects and Distribution of Poultry vaccine

Cost of feed, chicks, medicine and vaccines are the major expenses in the poultry industry of Nepal (CBS, 2016) . On average, 62.3% of the guidelines in 2014 to resolve the issues of antimicrobial opposition and initiated strategies for no anti-microbials in feed supplements. Anti-infection agents were utilized as a development advertiser in creature feed, however as of late MoALD has prohibited the utilization of anti-toxin feed supplement as a development advertiser in feed; notwithstanding, there are no options of anti-infection agents for the counteraction and treatment of creature sicknesses with the exception of some utilization of prebiotics, probiotics, and photoactive particles. Top seven anti-infection agents utilized in veterinary area in Nepal are antibiotic medication, enrofloxacin, neomycin, doxycycline, levofloxacin, colistin and tylosin and the most improperly endorsed anti-toxins are ampicillin, amoxicillin, ceftriaxone and gentamicin (Acharya and Wilson,2019).Numerous poultry ranchers in towns give self-medicine of anti-toxins furthermore, the unpredictable utilization of anti-infection agents without legitimate medication responsiveness testing prompts the improvement of anti-microbial opposition in the microorganisms. The supply of poultry meat and eggs in the market without appropriate withdrawal period prompts the presence of anti-infection buildups. Anti-infection buildups present in the compost utilized for farming yields ultimately reaches to people as end purchaser of farming items through biomagnification. Viable utilization of antibodies can keep poultry contaminations from various microorganisms as well as defer the opposition advancement in microbes against these anti-microbials (Marangon and Busani, 2006). In this manner, advancement and utilization of antibodies against various bacterial microbes of poultry can likewise contribute towards the decrease of anti-toxin opposition issue in poultry area safeguarding poultry as well as human wellbeing in Nepal.

3.3 Challenges Faced by the Poultry industry in Nepal

However the quantity of birds and efficiency is expanding, poultry area in Nepal faces many difficulties. As a matter of first importance, the expense of per unit creation of poultry is high because of expensive crude feed materials and wasteful showcasing structure (Dhakal et al., 2019). More than 75% expense of creation is credited to take care of and medicines (Sharma, 2010). Nepal is intensely dependent on poultry feed fixings, particularly for maize as the energy source and soybean, sunflower, and meat and bone dinners (MBM) as protein sources.und 0.55 million tons of maize are used for poultry feed per annum of which just 35% is homegrown creation. Practically close to 100% of protein sources are imported including around 180,000 tons of soybean supper, and around 27,000 tons of sunflower what's more, MBM each year. On normal Rs. 1.8 billion every year is contributed to import poultry feed supplement (Singh, 2018). Lower ideal efficiency of eggs and higher mortality of birds because of intermittent episode of different irresistible sicknesses add one more layer of difficulties in poultry industry (Osti et al., 2017). Unfortunate biosecurity measures, inaccessibility of exceptional sickness determination offices, absence of well trained specialized labor, and improper utilization of anti-microbials prompting anti-toxin opposition comprise other serious issues of poultry cultivating in Nepal (Acharya and Kaphle, 2015). The lower creation cost of poultry in India, open boundary, and absence of enforceable guidelines and quarantine offices lead to sneaking of poultry and poultry items in Nepal. This illicit import results in undesirable rivalry with the in-country creation framework while raising the gamble of transmission of different poultry microorganisms. The permeable boundary with adjoining country, feeble epidemiological examinations, poor checking and quarantine, and inaccessibility of proficient medications and immunizations are fundamentally answerable.

3.4 Distribution

The demand of poultry meat and eggs is expanding at the yearly pace of 25% and 10% separately in metropolitan regions however the yearly development pace of poultry is only 2.38% (Acharya et al., 2015). The results of poultry (egg what's more, meat) have generally been playing in elevating the existence standard of little holders and absolute Gross domestic product of the country. This is an area thrived with unconstrained private area drives on speculations, market investigation what's more, development. As indicated by Dr. Tilchandra Bhattarai, a poultry analyst "Lower cost combined with dietary benefit of poultry items and their developing prevalence among buyers has released a gigantic potential for business extension the nation over. for endemicity of numerous poultry-related bacterial, viral and parasitic infections in Nepal (Acharya and Kaphle, 2015; Dhakal et al., 2019).

4. Conclusion

Poultry industry is one of the booming industry in Nepal. Poultry meat becomes main sources of animal protein in the human diet in Nepal, and in the recent years, poultry production has become one of the most dynamic subsectors in Agriculture. The purpose of this study is to shed light on the most important economic and productivity factors affecting the broiler production in Kirtipur area under the current circumstances. In conclusion we can say poultry meat production is a profitable business in study area which increases with increase in size of farm.

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