

Review Article

Situation of Livestock, Production and its Products in Nepal

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Abstract

Nepal is a land where animals outnumber humans (28.98 million) and livestock an integral part of the way of life. Agriculture still remains the main occupation dropping rapidly through, but still hovers around 65% population, livestock covers 32% of agricultural GDP and about 11.5% of total country GDP. Livestock forms integral part and the combined population of bovine is estimated to be around 25.54 million and six species of animals represent major livestock's raised and total number of animals around 94.57 million. The problem of Nepal revolves around the resources for inputs, capacity to achieve optimum management and value for products. Socio legal laxity, limited technical approach and capacity to diversify and value add remains major challenges. With billion each population on North and South, resources that can support sustainable production and products that can fetch premium price, Nepal have huge scope in its livestock sector.

Keywords: Livestock; Nepal; Production; Situation

1. Situation of Livestock, Production and its Products in Nepal

1.1. Geography

Nepal lies on sub- tropical region in the world and climate, weather and vegetation vary among the regions [1]. Geologically, Nepal is divided into five tectonic zones: Terai plain, Siwalik Hills, Lesser Himalaya, Higher Himalaya and Tibetan - Tethys Himalaya and physiographical into 8 units Terai, Siwalik, Dun valleys, Mahabharat range,

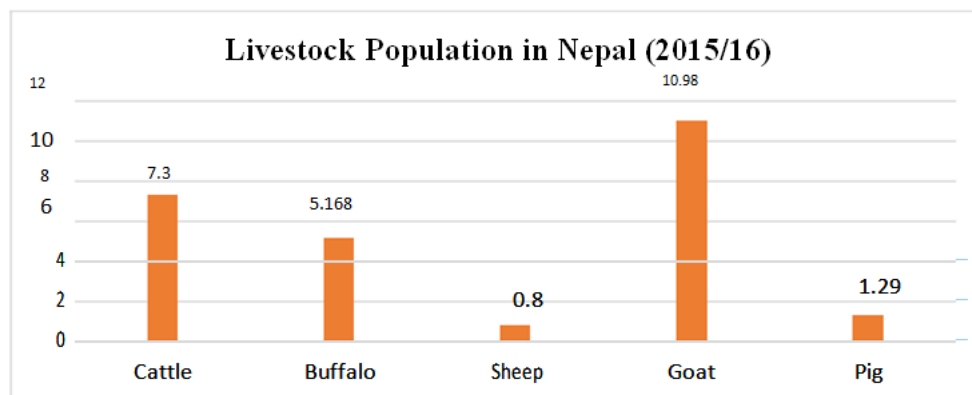
Midland, Fore Himalaya, Higher Himalaya and Inner and trans Himalayan valleys [2]. Nepal is rich and full of natural geographical typically country [3]. Where we found the diversity in nature in a different environment in different ways and at different climate found in different region [3]. A country divided into the 7 province, 14 zones and 77 districts.

1.2. Religion

Nepal is a secular country, where numerous Religion, Ethnic groups, Cast, and Tribe, different languages, dress, custom, and culture and community of people are settled [4].

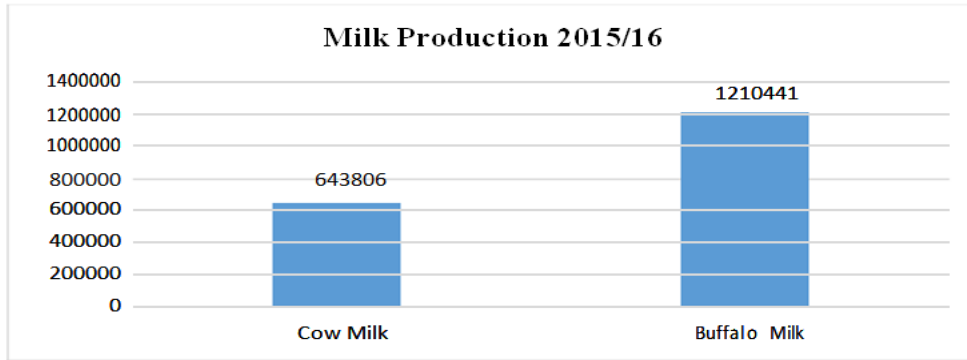
1.3. Animal husbandry

Nepal is an agricultural country, most of the animal's exhibit all over the country, whether it is for the home purposes or business. Agriculture and animal husbandry for a village of farmers is a backbone in the rural community. Mountains as well as hilly region as the most geographically different to some extent still is, farming along with ox, carrying the load with horse, yak, donkey, mule. Due to lack of equipment's animals are used for the purpose of agriculture (Shrestha). About 25.68% [5] of the people of the country are in animal husbandry practices, such as cow, bee-keeping, poultry, fisheries, pig, goat, swine and ostrich farming, literacy rate 65.9% [4] (Figure 1-5).



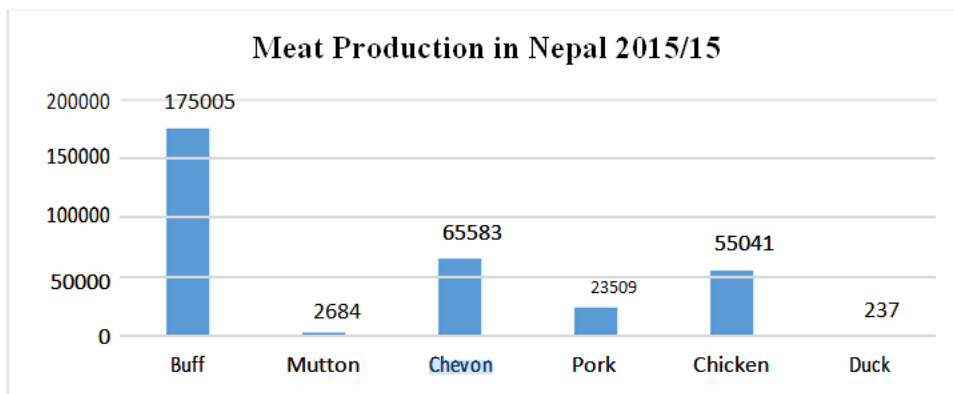
Unit: in Million

Figure 1: Livestock Population in Nepal (2015/16). Data Source: Statistical Information On Nepalese Agriculture 2072-73 (2015-16).



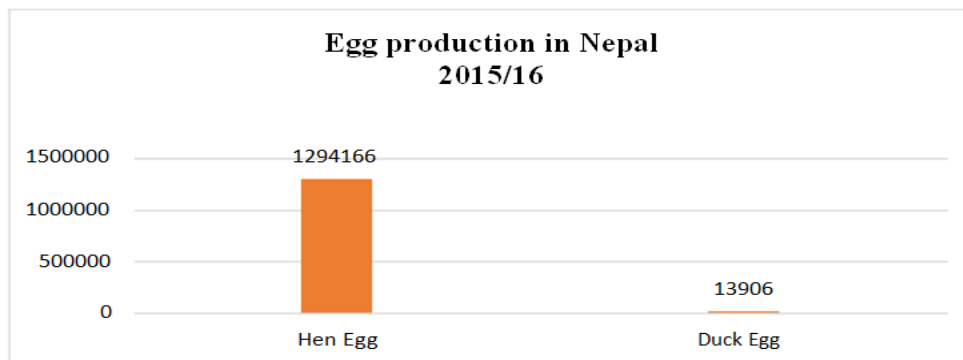
Unit: in metric ton

Figure 2: Milk Production 2015/16. Data Source: Statistical Information on Nepalese Agriculture 2072-73 (2015-16).



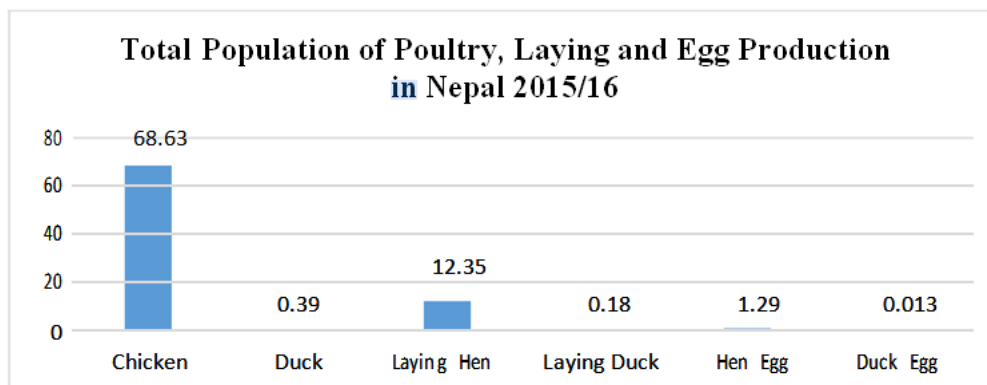
Unit: metric ton

Figure 3: Meat Production in Nepal 2015/15. Data Source: Statistical Information On Nepalese Agriculture 2072-73 (2015-16).



Unit: 000' number

Figure 4: Egg production in Nepal 2015/16. Data Source: Statistical Information On Nepalese Agriculture 2072-73 (2015-16).



Unit: Million

Figure 5: Total Population of Poultry, Laying and Egg Production in Nepal 2015/16. Data Source: Statistical Information On Nepalese Agriculture 2072-73 (2015-16).

1.4. Tradition, festival, and religious value

The old tradition but trending to nowadays, after the mensuration cycle completed, the woman/girl pure themselves with spray of cow urine in the body, in the clothes wore during the menstrual period, slept place and with the dung plastering the slept place. A house without cow is not pure, devotional worship cow's milk variety, dung, ghee except other substances customary do not accepted. The great festival of Hindus festive Dashain and Tihar, animal as dog, cow, bull, crow is worshipped. These animals have their own importance in the festivals.

In Nepal majority of the Hindu god's sake as cows, the incarnation of goddess, mother, different products used in the worship of God. Traditionally, where the pet has brought up, is not eaten by the owner. It is a good proverb, cow milk, butter, ghee is that the best for the health than others animal's product. Religious faith is yet to be animal protection and is in a state of living. This faith can also save the animals to be endangered.

1.5. Problems

In the past few years since from the country's political instability, economic, unemployment, illiteracy, youth for foreign employment. More emphasis on the production of hybrid and people are crossing today, with local and advanced race beings from birth as a good product, a good cross from the old production by birth (Survey, 2017). Now take the product to greed, turning the old race animals are evolving. It is not only in a cross cow but the problem from being in almost all animals is coming. For this reason, the old species of livestock are going in missing day by day. Day by day increase in population eligible cropland in the choice of home, the situation is in progress predatory theft by deforestation. This can directly affect the grass and fodder problem which is directly related to the animal.

But nowadays the scarce of fodder and grass is also one of the problems for the rearing the animals. Lack of knowledge, awareness of livestock, people is more engaged in the other's business. This lacking knowledge of the people which impacting on the livestock development. For the human entertainment the animal like bull fighting, cock fighting can be seen. Various chemical substances in order natural dairy products such as artificial products in the markets impact on the livestock. During festive time, meat imports are maximum from India which shows weak meat industry in Nepal. Disease lack of grasslands, lack of support from government farmers unaware of vaccinations lead to the high production cost of raising animals.

1.6. Cattle situation and problems

The cow is the national animal and was domesticated from thousands of years. By Hindu, both sexes of cattle are precept as the god and goddess, cow as a mother and Ox as a guardian of Kailasa mount of Lord Shiva.

Some people are in cattle farming as a business and many most in the rural area for as a god, dairy products, and fertilizer. Besides the current situation problem in pet cow except who rearing as a business. A left cow can be seen everywhere at the roadside, jungle at most in the Terai region, and there is no any exact data describing left and dead animals. The trend to abandon the male cow has led to increase in male cow numbers at roadside. Many of them die due to road accidents, predated by wild animals and ultimately die due to injury or disease. Abandoned animals destroy the farmer's crop as well as eating the left overs of street including plastics have led to their deaths due to bloat and digestive disorders [6]. Sometimes pregnant cows are taken home while they give birth but are left once they are in dry period.

This problem does not prevail in the Buffaloes because if once the Buffaloes are unproductive, worthless they are taken for slaughter. Buffalo's meat is gaining popularity but cattle not used as meat due to Hindu residence in Nepal. Technology have left behind the use of bulls for ploughing which is also the reason for abandon of bulls. All kinds of meat accepted except beef in Nepal due to the Hindu religion as God-fearing, eating beef is a sin, go to hell in religious faith that does and that in the religious texts (Bhagwat Geeta). Due to fear of God, male and dry cows (old cows, unfertile) are left to survive on their own. This practice has become a problem who solution is to be found by the government.

1.7. Modernization and its consequences

Nepal is a developing country where majority of farmers are relying upon modern machineries for agriculture which is easy, where the old style is withdrawing days by days having its most efficient impact on the animals. Ox, male buffalo, horse, donkey were used previously to pull cart and other agricultural works.

Previously, people were using the livestock for agriculture were also dependent upon them for products like milk, meat and their dung for fuel purpose. But the modernization has led to the use of milk products and meat which they have to buy from the market. Fresh meat and milk products were the advantage past farmers and people use to have but modernization have given the output as processed milk and frozen meats. Modernization have led the bulls unused by the farmers because they are dependent on tractors for ploughing field. The consequences of this can be seen as bull calf are left on roadside to live on their own as Nepal is a Hindu country and beef meat is illegal. Thus, highlighting the issue of animal welfare.

Yes, modernization is necessary for the upliftment of the living style but has several disadvantages as the amount of care the

animals used to get a century back is lacking now.

1.8. Rearing system

Animals reared in Nepal are mostly taken care by the farmers and are fed on the leftovers, field by-products and from the kitchen garden (Joshi). They are allowed to graze on the rangelands and wetlands. Most of the animals are raised for the purpose of milk and meat. The reason behind this is majority of the people in Nepal are dependent on livestock for their livelihood. Animals are raised in a very low facility where animal right is mostly violated which is clearly unknown to farmers due to his/her financially weak condition. Only in commercial industries, animals are raised well and are taken care of due to the huge investment by the owners and the availability of a veterinarian. The current situation in Nepal alters as per the area and purpose of the livestock used.

1.9. Animal rights

Animal welfare directive, 2073 (2016 A.D), Nepal: <http://animalnepal.org/wp-content/uploads/2017/04/Animal-Welfare-Directive-2073-English.pdf>

1.10. Animal welfare in Nepal

Animal Welfare under the Ministry of livestock development programs rule is ejected, animal welfare directory-2073, rules and laws are from MOLD. Due to the political instability has not yet been any concrete rules and regulations and follow-up of human ignorance that any development will not be focused on the animal welfare.

Pigs, goat, sheep, male buffaloes are not slaughtered in a scientific way. Slaughtered the animals by the wrong way, killing by the axe, spade hitting in the neck and head several times. On the road, the street dog, left cattle is beaten by the stone. No any roles by the GO's, NGO's toward the livestock problems seen in the recent years. This problem exists within the society, government bodies and the situation seems to be more complex in nearby future.

1.11. Superstition

Distortion on the name of religion is being spread. It is believed that God is pleased when sacrifices of animals like male buffaloes, chickens, goats, pigeons are done. Animal sacrifices is meant to please the god, for the family happiness; tradition before but have been fun and entertainment now for the present generations [7]. Hence, superstition played the role for the humiliation of animal right and welfare.

The Gadhimai festival held once in 5 years, thousands of Nepali and Indian devotee came, worship and sacrifice the animals. More than 250,000 animals were sacrifice on a two-day religious festival in Gadhimai Festival, Bara, Nepal. Where mainly buffalo, goats and birds are scarified to please the god [8]. About 5,000 buffaloes (half than the previous year) and more than 100,000 goats, chickens and ducks have sacrifice in Gadhimai Mela in the name goddess [7]. The animal rights organization always try and criticize to stop this kind of inhumane and cruel sacrifice, but the people superstition is the major problem which is a major obstacle.

1.12. Social choices and preference

Being social person, all have our preferences and dislikes. People living in upper hills may socially like chyangra and yak meat, in

contrast, people in terai would prefer poultry and buffalo meat. In an area, if there is a balanced social choice of the animal products, animal rights are not much harmed. If an area, consists of people preferring buffalo milk and meat, the animal would be raised for milk and then after used for meat. But if an area has people with no choice for meat, old animals will be left on roadside as useless animals. Therefore, social choices if balanced, livestock welfare will not be harmed.

1.13. Meat import

Nepalese are far behind than other developing countries in meat consumption and production. On an average a Nepali eats 11.15 kg meat per year. Per capita meat consumption was 9.8 kg / year in 2008 and 9.7 kg / year in 2000. According to the Food and Agriculture Organization of the United Nations, the world average meat consumption stands 42.5 kilograms per person per year. In developing countries, the rate is 32.4 kg. In industrialised countries, average meat consumption amounted to 79.2 kg.

- Total live animals import- 736439 pcs and cost 3 billion
- Total live fish import - 5 million and cost 400 million
- Total live fowls import - 5730 pcs and cost 1 million
- Total meat import- 2585. 871 tons and cost 400 million

Live animals include horse, cattle, buffalo, swine, and goats. Imports of meats include buffalo, sheep, goat, swine, horse, chicken, molluscs, crustaceans and fish. Data Source: Government of Nepal, Ministry of Finance, Department of Customs (2015/16).

2. Conclusion

This review shows the current livestock scenario of Nepal. Due to a developing country, livestock sector is also in increasing ratio. Low literacy rate, traditional farming system, lack of technical knowledge in farming system, poor management practices, poor nutrition are major cause of low animal production in Nepal. This causing the deficient in animal's products such as, egg, meat and meat products. Country's compulsion is about 3.8 billion annual to meet demand only for animal, meat and its products. Animals are abandoned due to low production, poor reproductive performance, infertility are the main causes, which is major caused by poor nutrition. Focus on management practices, technical knowledge, proper nutrition can help to substrate the annual expenditure in some amount. Due to variation in climate, weather and various flora (annual, perianal grass and tress) are found according to geographical region, from this advantage can be taken to reduce in nutritional deficient and different breed of animals can be easily reared, produced and adapted.

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