Male buffalo calf rearing

A means to boost rural economy

Purushottam Kaushik¹, Pankaj Kumar² and Shanker Dayal³

Bihar Veterinary College, Patna

IVESTOCK population in India is 530 million and ranks first in buffalo, second in cattle and goat, third in sheep, and fifth largest in poultry population in the world. India shares 58% of world's buffalo population which turns out to be about 98 million, mostly reared by poor and marginal farmers. In India, buffaloes are mainly reared for milk production and it has been estimated that about eight million male buffalo calves are removed from the production system owing to intentional killing by farmers with a view to save mother's milk and feed. Because of lack of awareness about the remunerative value of male calves among livestock farmers, they do not want to raise male calves. As a result, the country bears a huge economic loss to the tune of approximately ₹75 crore annually. In a study, conducted by the Central Leather Research Institute, Chennai, 42-88 % mortality among male buffalo calf was reported which could otherwise be salvaged for meat and hide production, thereby improving economic status of poor and marginal farmer. In spite of these all, buffalo contributes 1.48 million tonnes of meat, amounting 24.54 % of the total meat produced in the country. At the end of financial year 2013, India had exported buffalo meat worth USD 29 million, mainly

contributed by nonlactating culled buffaloes.

This indicates the growth potential of buffalo meat industry, which is still untapped, for sustainable growth in the meat export of country, generating huge opportunities for employment generation and improvement of economic status of 70 % of rural population in India.

Entrepreneurial opportunity

Export of animal products contributes significantly to the Indian Agriculture sector. The increase in economic activities around the world resulted in increased purchasing power. This coupled with population growth acts as the driving force for increased meat requirement globally. The projection of growth in global GDP and population through 2050 suggests a substantial increase in meat production requirement in the future. The agriculture development economics division of Food and Agriculture Organization, 2012 reported world consumption of bovine meat as 62.312 million tonnes which is expected to increase by 1.2 % per year through 2050 (Table 1and 2). Almost 50% of the total world meat consumption is by developing countries alone. Buffalo meat is produced primarily in Asia and contributes 1.3 percent of the total meat produced globally. India

Table 1. World meat market at a glance (Million tones)

World	
Production	297.1
Bovine meat	66.6
Poultry meat	102.3
Pig meat	108.8
Ovine meat (Sheep and Goat)	13.8
Trade	28.8
Bovine meat	8.0
Poultry meat	12.7
Pig meat	7.1
Ovine meat (Sheep and Goat)	0.7
Per capita food consumption	
World (kg/year)	42.4
Developed country (kg/year)	78.9
Developing country (kg/year)	32.4

Table 2. Indian meat market at a glance (Million tones)

India	
Production	7.2
Bovine meat	3.0
Poultry meat	2.9
Pig meat	0.3
Ovine meat (Sheep and Goat)	0.9
Trade (Export)	1.221
Bovine meat	1.2
Poultry meat	0.01
Pig meat	0.001
Ovine meat (Sheep and Goat)	0.01

produces 1.48 million tonnes of buffalo meat annually and accounts for 24.54 percent of total meat production contributing significantly to human nutrition. In India, slaughter of cattle is prohibited due to religious concern, except a few

Employment generation among rural youth and economic development of poor and marginal farmers has become a major concern to the government. In the present scenario of increasing population and therefore increased demand of nutritious food is on the rise globally. Under such condition rearing of male buffalo calves for meat production may play an important role in generating employment and economic development of farmers.

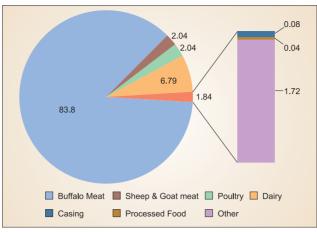
states, however slaughter of buffalo is permitted which provides an opportunity to export buffalo meat from India.

Meat quality and export potential

The demand for buffalo meat (cara beef) has increased in the international market because of its inherent nutritional quality. Cara beef is the healthiest meat among red meats available for human

consumption. The meat is relatively lean with a low fat and cholesterol content and also is free from Mad Cow Disease as the animals are only fed grass and farm by-products. Apart from this, buffaloes have a unique ability to utilize coarse feeds, straws and crop residues, easily available in India, converting them into protein rich lean meat. This makes cara beef production 2-3 fold cost effective than mutton and goat meat. The functional proprieties of buffalo meat could also be improved for product processing to increase its popularity. Therefore, the future potential for buffalo meat and meat products is promising for India both on the domestic and international market fronts.

India's exports of animal products was recorded to ₹ 20,778 crore during the financial year 2012-13, of which buffalo meat alone contributed 83% whereas rest of the 17% of the animal product export was from sheep, goat, poultry, dairy and other products. The sudden increase in the meat export is driven by increased demand for Indian buffalo meat in international market. This gives us the platform and opportunity to exploit the livestock resources and genetic potential of buffalo for the sustainable development of meat industries and livelihood of poor and



Percent contribution in export of different animal products from India

marginal farmers. Competitive pricing of buffalo meat in India is boosting its deliveries to the countries like Thailand, Philippines, Malaysia, Vietnam, Gulf countries and Egypt.

Apart from producing meat, the hide and skin of buffalo can also be utilized, on which leather industry thrives. The leather industry also contributes significantly in the Indian economy and has a massive potential for employment generation, growth and exports of leather goods. The industry employs more than 2.5 million people, mostly from weaker section, 70% of which are women. Increasing demand of raw material raw hides, skins and semi finished leathers are the major challenges for the leather industry that can be fulfilled by rearing male buffalo calf for meat production and supply of skin and hides to leather industries. Therefore, a huge opportunity exists in the country to salvage male buffalo calves and rear them commercially to cater meat and leather industry of India.

CONCLUSION

Livestock farmers may come forward and set up commercial farms for rearing and fettering of male buffalo calves. This can also be started with rearing of calves in small herds by poor and marginal farmers and add handsome income out of this. Furthermore, the youth can also engage themselves in rearing of calves, trade of live animals and export of buffalo meat. Sensing the untapped potential and large headroom to grow, the Department of Animal Husbandry Dairying and Fishery, Government of India has already taken initiative in this regard and launched a scheme titled "Salvaging and rearing of

male buffalo calves" from 2011-12. scheme was aimed with objectives to save and raise male buffalo calves for meat production, increase availability of buffalo meat for domestic use and export, expand raw material base for leather industry, improve India's foreign exchange earnings through export of buffalo meat and leather goods and enhance employment opportunity in rural areas. Through this initiative, the government supports rearing male buffalo calve by providing subsidy. The responsibility of sanctioning and release of subsidy rests with the National Bank for Agriculture and Rural Development (NABARD). The details of the scheme can be obtained from the official website of NABARD.

SUMMARY

Buffaloes in India are a source of raw material like raw hides, skins and semi finished leathers for the leather industry. Male buffalo calf is specially reared for meat production and supply of skin and hides to leather industries.

¹Asst. Professor Deptt of VPH, BVC, Patna, ²Asst. Professor Deptt of Vety Microbilogy, BVC, Patna, ³Senior Scientist, ICAR, RCER, Patna.

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