

Role of dairy farming in social and economic change of India

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Abstract.

Our country is one of the world's largest and fastest growing markets for milk and its milk products. It is getting almost 75 percent growth annually in value terms for milk and milk products. Indian agriculture is an economic symbiosis of crop and milk production. Historically, the role of livestock has been complementary to crop production. Dairying and agriculture are bound together by set of mutual input output relationship. It once a subsidiary enterprise to agriculture has become a major enterprise and crop production are depend on dairying. Although dairying is by large in the hand of small and marginal land holders and agricultural laborers. About 80 percent farm family in India posses cows and/or buffaloes as a part of family. Animal provide nutrient-rich food products, draught power, dung as organic manure and domestic fuel, hides & skin, and are a regular source of cash income for rural households.

Keywords: *Milk, protein, livestock, dairy, income, fuel, production etc.*

I. Introduction

Livestock sector is an prominent sector among agriculture and allied activities in India. Dairying plays an important role in socio economic life of India. In India, dairy is recognized as an instrument for social and economic development. Livestock production is backbone of Indian Agriculture and source of employment in rural areas for centuries. This sector has been the primary source of energy for agriculture operation and major source of animal protein for the masses. Therefore India has been house to major draught, milch and dual-purpose breeds of cattle. Our whole system of rural economy has revolved around livestock production. Livestock are natural capital, which can be easily reproduced to act a living bank with offspring as interest, and an insurance against income shocks of crop failure and natural calamities.

Driven by the structural changes in agriculture and food consumption patterns, the utility of livestock has been undergoing a steady transformation, the non-food functions of livestock are becoming weaker. Importance of livestock as source of draught power' has declined considerably due to mechanization of agricultural operations and declining farm size. Cereal and legume crop straws have been traditional source of feed for India livestock. These straws have not been valued much in the past but with competitive milk production, its importance as source of feed has gone up tremendously.

Use of dung manure is increasingly being replaced by chemical fertilizers. On the other hand, growth, a fast-growing urban population, burgeoning middle income class, changing lifestyles, increasing proportion of women in workforce, improvements in transportation and storage practices and rise of supermarkets especially in cities and towns are fuelling rapid increases in consumption of animal food products.

Milk production trends in india

In India the average farm size is between 1-3 cows per farm, with 1,000 kg/cow/year on average. Most milk is sold before entering a processing plant and the supply chain is long and complicated. Dairy is sold in small unit rather than in bulk volumes. India's milk production continues to grow, to the point where it now tops the milk output of all the European Union countries.

Several measures were taken to increase the productivity of livestock, milk production has significantly increased by about 25 % from the level of 102.6 million tones at the end of the Tenth plan by the end of 2006-07 to 127.9 million tones at the end of the Eleventh Plan in 2011-12. When the Twelfth Plan began during 2012-13 milk production was 132.43 million tones with an annual growth rate of 3.54%. The per capita availability of milk in India was around 296 Grams per day in 2012-13, 146.3 million tones during 2014-15 as compared to 137.69 million tonnes during 2013-14 recording a growth of 6.26 per cent.

Milk production in India was up by a little more than 4% over the past 12 months, percent annual growth. India has actually been the world's top milk-producing country since 1997, but this is the first time that it has beat out the entire EU. On a country basis, the US produces the second-most milk, and China comes in third and it was 53.9 million tone during 1990-91 while now has become 140 million tonnes in 2013-14 by 6 percent annual growth. The share of agriculture output to GDP was decreased but in same period share of

livestock has increased. A growth rate of 4.5 percent has been achieved by dairy sector during past decades as compared to 2 percent growth recorded by agriculture sector as a whole. With 6 percent the Indian dairy sector is the largest contributor to country's GDP in terms of output milk is now single largest agriculture commodity in India and its contribution is 26 percent to agriculture GDP. The per capita availability of milk in India was around 296 Grams per day in 2012-13.

India has 75 million dairy farms, more than anywhere else in the world. The country with the next-highest number of dairy farms is Pakistan, with 14 million. (In both of these countries, the vast majority of dairy farms have fewer than 10 cows, according to the UN Food and Agricultural Organization.)

Among states, Uttar Pradesh continued to remain the leading milk producer, followed by Rajasthan & Gujarat. Whereas, the per capita demand was maximum in Punjab followed by Haryana in 2013-14. In last few years, there has been continuous increase in milk production in the country as demand for dairy products has risen substantially

Milk Consumption pattern

There is a long history and tradition of high dairy consumption in India, as urbanization is an ongoing process there will be shift from traditional to more commercial western dairy products as a result of changes in lifestyle. The consumption pattern of dairy products in India is quite unique as compared to some of the western countries. Consumption is primarily centred around traditional products; however, westernized products are gradually gaining momentum in the urban areas. Interestingly, buffalo milk accounts for the largest share of the total milk produced (55%) in the country. Since the pricing of milk is based on the fat content, buffalo milk offers higher profit margins as compared to cow milk as it contains higher fat.

Despite being the one of the largest milk producing countries in the world, India accounts for a negligible share in the worldwide dairy trade. The ever increasing rise in domestic demand for dairy products and a large demand-supply gap could lead to India being a net importer of dairy products in the near future.

As an instrument of social and economic change

In India, dairying is recognized as an instrument for social and economic development. The nation's milk supply comes from millions of small producers, dispersed throughout the rural areas. These farmers maintain an average herd of one or two milch animals, comprising cows and/or buffaloes. The animals' nutritional requirements are largely met by agricultural waste and byproducts. Ample labour and a small land base encourage farmers to practice dairying as an occupation subsidiary to agriculture. While income from crop production is seasonal, dairying provides a stable, year-round income, which is an important economic incentive for the small farmer to take to dairying.

II. Conclusion

Milk production in India is dominated by small and marginal landholding farmers and by landless labourers who, in aggregate, own about 70 percent of the national milch animal herd. As drought and floods, rendering agricultural income uncertain for most farmers. Shackled to subsistence production as a result of a shortage of finance and credit facilities, these farmers become entangled in a strangling debt cycle. The combination of an unfavorable land: person ratio and fragmented landholdings makes it difficult to support large families on crop income alone. It is not surprising that the small farmer and the landless labourer are more often than not victims of moneylenders and of natural calamities. Dairying, as a subsidiary source of income, is a real relief to most of these weaker groups in society. Often one or two milch animals enable these farmers to generate sufficient additional income to break the vicious subsistence

Undoubtedly, the major challenge for the dairy sector in India is to increase milk production in order to meet the increasing demand resulting from the almost more. The adoption of appropriate technologies for production, procurement, processing and marketing after the unique environmental, social, economic, political and cultural environment for social and economic development of our country. Now dairying has become an important secondary source of income for millions of rural families.

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