

Constraints of Dairy Farming in Himachal

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Abstract – Dairy farming is an integral part of mixed crops-livestock farming systems where a farm household owns one to two dairy animals on average along with other animals like sheep and goats on a small land holding ranging from 0.25 hectare to 1.00 hectare. Improved breed of dairy cattle, developed technique to grow green silage would ensure an increase in the income of peasants, feel dignified as self-employed, and upgrade the living standard of family members, especially of women, who are always remain busy with the milch cattle day and night without getting any pecuniary benefit except a little milk at subsistence scale. Milk production in particular and its lucrative marketing in general is a key constraint to dairy development. The problems of the marketing need to be addressed if it is to realize all potential to strengthen the nutritious food chain and provide impetus to development of the agriculture sector. The promotion of market based dairy farming in the state would help in improving the means of support of small and marginal farmers Himachal Pradesh.

Key Words: Mixed Crops –Lives Stocks Farming System, Milch Cattle, Lucrative Marketing, Peasants.

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INTRODUCTION

Since time immemorial, animal husbandry has been closely interlinked with agriculture in Himachal Pradesh. Livestock are an important source of income and employment in rural areas. Besides complementing and supplementing agriculture, animal husbandry provides security to farmers, especially when agriculture fails. Livestock are essential to millions of poor households across the country not only as a source of income but also as a major source of protein, supplementary nutrition, draught power, fertilizer, fuel and a store of wealth. In the post-Independence period, the Indian dairy sector has undergone a major shift, mainly due to the introduction of new technologies during the implementation of various dairy development programmes. Himachal Pradesh is located in rugged terrain of middle Himalaya. Due to extreme variation in elevation great difference occurs in climate conditions. The climate varies from hot and sub-humid tropical in Southern tracts to cold, alpine, and glacial in the northern and eastern mountain ranges. Agriculture is the main source of livelihood. It contributes over 45% to the NSDP¹. Over Ninety three per cent of the population depends directly upon agriculture which provides direct employment to seventy one per cent of its people. Himachal Pradesh ranked fifteenth in the list of highest per capita of Income of all states and union territories for

the year of 2013 -14.² The whole geographical area in context with the economic activities may be divided in upper and lower belt of the state. Upper belt, as mentioned above, is known for apple, and Pea, while the lower belt is known for mango and potato belt. The main cereals grown in the lower belt are wheat, Maize, Rice and Barley. Apple is the principal cash crop of the upper belt of the state grown principally in the districts of Shimla, Kullu, Karsog Tehsil of Mandi, some blocks of Chamba districts, some parts of Sirmaur and Lahaul-Spiti with an average annual production of 0.5 million tonnes and per hectare production is of eight to ten tonnes. The apple cultivation constitutes forty nine percent of the total area under fruit crops and eighty five percent of total fruit production in the state with an estimated economy of ₹350 million. The lower belt is identified as the key locale for promoting dairy farming in which the farmers are traditionally engaged in rearing cattle. By far, women are bestowed with the responsibility of domesticating cattle and performing household chores whereas men, in strength, are engaged in government as well as private jobs. Though there are many components of the development of dairy farming, high-breed cattle is considered to be the main component of it. Farmer rear indigenous cows for the want of money as high yielding cattle are beyond their economic affordability. Moreover they also lack sophisticated knowledge regarding the techniques and different breed of milch cattle. Rearing cattle of high yielding is the critical factor in

¹ "Indian States by GDP Per Capita" Statistics Times 20 August 2015. The Hindu Retrieved 31 May 2016, 2011.

² "Statistical facts of India" indianmirror.com, retrieved 26 October 2006

the development of dairy farming. Therefore, institutional efforts and financial incentives to the farmers are marked as stimuli in this direction. All the households have subsistence landholding ranging from 0.25 hectare to 1.00 hectare. They are traditionally accustomed to rearing cattle which is pivotal to their farming system. The dairy farming meets not only the demand of the milk, but also caters to spectrum of fundamental needs of the farmers. Traditionally, it has never been commercialized. However, it continued to be the critical dietary supplement for virtually every household of the state. Farmers diversify agriculture in order to mitigate risk and derive more economic benefits from their limited resources. Dairy farming is a critical dimension of diversified agriculture and most attractive economic activity for the farmers in the state. In pre-Independence, farmers reared indigenous or native breeds of cattle. Given the relatively low productivity of native breeds, milk production in the country was very low in relation to the huge cattle population present and dairying was confined to traditional pockets in the country. Various projects like technological as well as institutional have been taken up since 1950 onwards to promote milk production in the country. These initiatives covered the vital spheres of breeding, nutrition and health of milch animals as well as marketing of milk. After Independence, various programmes of dairy development have been taken up, such as the Key Village Scheme (KVS), Intensive Cattle Development Project (ICDP), and Operation Flood (OF)³ This paper discusses the scope and constraints of dairy development in Himachal Pradesh.

OBJECTIVES:

- A. To identify the major hindrances in the progress of dairy farming in the state.
- B. To Identify the constraints in the way marketing the dairy products
- C. To ascertain the causes of the failure of milk processing unit those are running under state control.

CHALLENGES OF DAIRY FARMING IN HIMACHAL PRADESH

• High cost of milk production

In Himachal Pradesh milk producers have to reduce the cost of milk production. The main reason of the high cost of milk production is due to average milk yield of domestic (deshi) cattle is much less i.e. 987 kg /year compare to 6273 kg/ year in Denmark, 5289 kg/ year in France, , 5938 kg/year in Canada, 5462 kg/year in United Kingdom, 7038 kg/year in USA and

11000 kg/year in Israel. So farmer of other countries have to spend much times less in compare to Indian farmers. Reason behind high production of milk is not climate. Israel has climate of 47C – 45C in summer and in winter it as 4C- 5C. So this high yield has been achieved through proper feed, water management and housing, apart from superior quality germplasm. Israel cows provide this much high milk yield by giving up high fat content. Then also per capita fat production of Israel is higher than India.

- High cost in milk handling and marketing In India dairy penetration is much less. Majority of milk is collected by private players and either sold to private dairies or to other member of channel. Milk passes through several levels till it reaches to pasteurization facility in dairy or to the final users. After milk reaches to dairy milk also passes through several distribution channel this also increase cost of milk. Whole process has double the milk price. In Himachal Pradesh shopkeeper purchases one litre of milk from farmers at the rate of 40 Rs/litre. The consumer due to high milk handling gets milk at the rate 60 Rs/litre. However there is good scope for reducing the number of agencies handling the milk to reduce the cost of handling and we can significantly reduce the retail price of milk.
- Poor quality milk due to unhygienic milk handling Main reason of poor quantity of milk is due to unhygienic and poor condition of animal farms and dairies. Even due to high demand in foreign country we cannot export such poor quality of milk product. Many times Indian milk products get rejected in foreign nations due to unhygienic milking milk contains high number of microbial count.

Reasons behind the quality affected in Himachal are due to lack of green fodder poor health of animal and unclean surrounding in farm. So it is necessary to consider all this challenges in improving milk production.

Currently most of the milking animals are not screened on regular interval of time. So there are lots of chances that some diseases can transmitted to human beings. Farmers use antibiotics, chemical drugs and chemical fertilizers to increase the production of milk this will also affect the quality of milk. These issues can be avoided by regular screening of animals in animal husbandry and also maintaining history records of health, feed etc. Quality of feed should be checked regularly. There must be pollution control in the feed and water used in cattle farms.

³ Impact of Dairy Development Programmes in India - An Economic Analysis, INDIAN JOURNAL OF APPLIED RESEARCH

EXAMINATION OF DAIRY INDUSTRY IN HIMACHAL PRADESH

Scope of dairy development

Large number of livestock population is vital asset for dairy industry. Sustainable re-production can assure future supply and will continue to propel industry growth. Milk animal has very low milk productivity; there is a huge scope of improvement in terms of milk productivity of animals. With continues growth in economy there is a growth in the income of middle class population this result in to high purchasing power. The milk consumption is a part of people's daily dietary habit in the state that assures steady growth in milk demand. Cheap labor availability of low cost fodder in form of farm residual keeps the cost of milk production low.

Shortcomings of dairy development

Penetration of cross breeds and high yielding animal are limited and Indian dairy farms have large number of low milk yielding animals.

Lack of road connectivity and poor infrastructure are major challenge for dairy farms in terms of supplying their raw milk to processing facility.

Majority of dairy farms are unaware about modern scientific dairy farming techniques, clean milk production and integrated supply chain.

Low growth rate, low returns on investment, lack of research, lack of reliable milk production data are reason that farmers are not willing to invest in dairy farming

Pressure on dairy development

Urbanization, Industrialization and burgeoning growth of population have put pressure on grazing lands. Result into complete degradation of grazing land. Crossbreeds have created threat many valuable indigenous cattle breeds.

India is undoubtedly the largest milk producing country of world. India has highest population of cow and buffalo. Since Indian independence dairy industry is showing steady and robust growth rate of 3 percent. Sector has seen huge improvement in supply chain and milk processing facilities. In Himachal Pradesh people are rearing cattle as there family members. Women love their milch cattle more than their children. Despite of such spirit of people regarding cattle, cattle farms has not adopted modernization and cattle farms are facing multiple challenges. Himachal Pradesh Government is serious but bureaucracy does not let the government work according to the demand and environment of the Himachal Pradesh.

Problem of Adulteration and Synthetic milk

This problem has decreased milk buyer's confidence. Eventfully milk consumers can shift to other options. Substitutes like soya milk; coconut milk etc. can replace farm cattle milk. Middleman are still controlling majority of milk procurements. Serious steps should be taken to reduce that. There is a gross lack of awareness among farmers about the quality parameters, including microbiological and chemical contaminants as well as residual antibiotics.

Prospects of dairy farming

With opening up of the economy milk producer has huge opportunity to sell products in global market. High economy growth has created opportunity to invest in dairy farms. Forward integration with milk cooperatives can improve the productively and profitability of dairy farms. Cooperative animal rearing and animal hostels can unlock the potential. Dairy farm can adopt new technologies that can improve productivity, operations and profitability.

CONCLUSION

The dairy industry in Himachal Pradesh is flourishing in the form of tiny units which consists of hardly two milch cattle per units and in government running dairy plants which are running under losses owing to availability of required amount of milk and demand shocks. The dairy marketing system here is very complex. The farm holders don't sell milk to the consumers directly rather supplied it to the shopkeepers and they after adding water in the milk which has been already adulterated through adding water by the farm holders sold to the consumers at higher price. It forces consumers to use low quality milk and deprived from consuming nutritious and pure milk even after paying exorbitant price. There is no institutional control over the farm holders and milk dealer to ensure the quality and purity of the milk. The government policy towards the developing dairy farming and maintaining sanctity and purity of milk appears oblivious and objective disoriented. It has also been ascertained that dairy farm holders add chemical fertilizer.

REFERENCES

- Birthal, P. S. and Negi, Digvijay S. (2012) Livestock for higher, sustainable and inclusive growth. *Economic & Political Weekly*, 47(26 & 27): pp. 89-99.
- Chand, K.P.; Swarup, R. (1991). *Appraisal of a Successful Marketing Co-operative in Himachal Pradesh Shimla (India): Himachal Pradesh University, Agro-Economic Research Centre.*

- Kumar, Virender, Sharma, H.R. and Sharma, R.K. (2004). Livestock economy of Himachal Pradesh: Growth patterns, ecological implications and state policy. *Agricultural Economics Research Review*, 17(1): pp. 5776.
- Kumar, Chand, R. (1995) 'Livestock in Himachal Pradesh: Factors Affecting Growth, Composition and Intensity'. In *Indian Journal of Agricultural Economics*, 1. Vol 1(3) NABARD (1997)
- Dairy Development in Mandi District, Himachal Pradesh. Ex-post Evaluation Study. Shimla: National Bank for Agriculture and Rural Development Singh, R. (1997)
- Economics of Livestock Production System in Himachal Pradesh Shimla: Himachal Pradesh University, Agro-Economic Research Centre.
- Virender (2011) Agriculture in Himachal Pradesh: Issues for the Twelfth Five Year Plan. *Indian Journal of Agricultural Economics*, 66(3): pp. 279-288.

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