

Abstract

A key challenge facing dairy farming is to meet the increasing demand for dairy products from a growing and more affluent global population in a period of unprecedented socio-economic and environmental change. In order to address this challenge, policies are currently placing emphasis on 'sustainable intensification' (SI), i.e. producing 'more' outputs and services with 'less' resources and environmental impacts. Determining whether or not SI can deliver greater yet sustainable dairy production requires understanding of the relationships between sustainability pillars and farm under particular farming systems and circumstances. Trade-offs between pillars and aspects is inevitable within a farming system. The role of livestock in agriculture in Sri Lanka is complex and significantly different from that of industrialized nations. Although the livestock sub-sector has contributed only around 1.2% to the national Gross Domestic Product (GDP), it has been a crucial source of high quality protein, minerals and vitamins to the population, by way of milk, meat and eggs. For many rural smallholder farmers, livestock are a 'living bank' that serves as a financial reserve for periods of economic distress. The current status of the dairy industry in Sri Lanka is far below expectations, local production of milk have been able to meet only 40% of the demand. Whilst there have been many political, technical and socio-economic factors contributing to the virtual stagnation of the dairy industry in the country, the very low farm gate price being one of the major contributors to this, it appears that the sector cannot continue to survive as a subsistence based activity, because it is only a secondary source of income to the farming community. It is apparent that if dairy farming is to be a profitable venture, there is a need for the small holder farmers to consider dairying as a commercial enterprise and at the same time link with the large scale dairy farms. This would require major policy changes, with a strong commitment and sustained implementation strategy by the government in partnership with the private.

The objective of this research is to investigate the determinants of sustainable dairy farming system in the coastal area of Eastern Province in Sri Lanka. A structured questionnaire was used to collect the data from 300 dairy farmers. The data was collected to fulfil the requirements of variable such as socio, economic factors, environmental, circumstance and the farm aspect. It was found that, there were significant positive

relationship between dairy farm sustainability and factors such as socio, economic factors, environmental, circumstance and the farm aspect. It is recommended to promote a liquid milk market, upgrade the native herd, focus import policy and fiscal policy on dairy products, promote livestock production among vulnerable groups, stronger extension services and human capital development, improvement of feed resource, develop a viable commercial dairy industry, financial support for dairy farm expansion, allocation of permanent grazing / pasture land, design proper training programmes, a concept development on good understanding of socio-economic and biophysical factors in any farming system and frequent monitoring and sustainable feedback mechanisms.

Keywords: Sustainability pillars, farm aspects, circumstances