

Harnessing the Potential of Livestock in Mixed Farming Systems in India

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The most dominant form of livestock production in India relates to mixed crop-livestock system. Pressure on agricultural land forces cultivators to maintain livestock for manure purposes, consume the meat or egg to meet the need for dietary protein and of course to ensure a little milk for the children and the aged. Smaller the farm size, greater is the need to keep a given fleet of livestock so that real income reaches a moderate figure. Productivity of farm livestock in regard to both meat and milk in India happens to be below the world average. Inadequate provision of fodder and lack of good grazing lands are the most important factors holding up productivity growth. Crop residues from cereals and pulses like rice bran or wheat bran serve as good cattle feed but they have more lucrative uses epitomized in bran scams. The paper argues in favour of technological change in fodder and introduction of cultivated grazing lands.

Introduction

Based on degree of integration with crop production the world livestock production can be classified into three systems, i.e., grazing systems, industrial systems, and mixed crop-livestock systems. Globally mixed farming systems are by far the most important, contributing 54 per cent of global meat production, 100 per cent buffalo meat and 90 per cent of milk production (de Hann *et.al.*, 1998).

The integrated nature of crop-livestock production is a unique characteristic of agricultural production in most of the developing countries including South Asia. The inseparability of the two, in fact, leads to symbiotic production. Livestock provides draught power and manure while crops provide feed and fodder for animals. The scale of production of both crops and livestock is small, yet the complementarities between the two have considerable social, economic and environmental impact. Livestock are an important source of income and employment for the rural poor. Being more liquid in comparison to land, livestock act as a cushion against risk and uncertainty in crop production. Being partially closed systems, Mixed Crop-Livestock Systems (MCLS) are environmentally the most desirable. The waste products of one enterprise (crop production) can be used by another enterprise (animal production), which in turn returns its own waste (manure) back to the first enterprise (Thomas and Zerbini, 1999).

This paper highlights the diversity and complexity of mixed crop-livestock systems in India and the role and contribution of livestock in these systems. The challenges facing the sector in raising the productivity of livestock are discussed in subsequent sections, followed by conclusions.

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