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## Fodder Production and Utilisation Patterns in Disadvantaged Areas: A Study of Eastern India

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### Abstract

The Indian dairy sector is characterised by an inadequate supply of fodder and lack of knowledge on feeding. The fodder scarcity affects most farmers, especially small and landless livestock keepers. It is documented that crop residues, especially rice and wheat are the main feedstuffs that supply about 44 % of the feed requirements of cattle in India. It is therefore necessary to understand the problems in fodder production, traditional utilisation patterns and knowledge about quality of fodder, which could help farmers to utilise the local feeds in a better way for meeting the future challenges.

The present study was carried out in Bihar state of India to understand production and feeding strategies of different classes of farmers, distinguishing surplus and deficit. The primary data was collected from four surplus and four deficit zones districts of Bihar. Results show that rice-wheat crop residues are common feeds and these two crops constituted more than 90 % of dry fodder production in the fodder surplus zone, whereas in the fodder deficit zone these crops constituted 78 %. Paddy straw was the most important dry fodder accounting for 67 % of sale volume; its share was higher in the surplus zone: about 72 %. Wheat straw was the second important dry fodder with respect to production and marketing. The type of fodder used also depended on the intensity of production: with increasing intensification of dairy production, the share of wheat straw being fed to dairy animals increased. However, the recent decline in the area under rice and the use of combine harvesters in rice and wheat crops, particularly in the fodder surplus zone, presents a threat to fodder availability in Bihar.

According to farmers' perception on fodder quality, short chopped straw was the most desired quality of paddy and wheat straw. Bright colour was the second important quality attributed for wheat straw, and fourth for paddy straw. Purity of fodder emerged as third important attribute for wheat and paddy straw.

**Keywords:** Rice straw, wheat straw. livestock productivity, quality, smallholders