

# Feed resource availability and fodder markets in northern Ghana

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## Key messages

- Information on forage and crop residues availability and feed market development can enhance feed utilization and contribute to livestock productivity
- Growing feed shortage among livestock farmers has triggered the emergence of feed markets particularly in peri-urban areas.

## Objectives

- To estimate forage and crop residues availability across seasons as feed resources to improve livestock productivity.
- To determine types of feed sold and their price across seasons.

## Approach

- Estimation of available forage was conducted across seasons {Early dry (Nov-Jan), late dry (Feb-Apr), early wet (May-Jul), and main wet (Aug-Oct)} in communal pasture. Crop residues yield was estimated at crop maturity. Quadrat pasture yields estimation method was used (Nitis, 1997) for data collection in 9 AR communities in northern Ghana. In each community, 8 quadrats samples were randomly taken in each season in all locations.
- Emerging feed markets were surveyed in Tamale, Bolgatanga and Wa markets to determine feed types and prices of feed sold. Three samples of each feed sold were bought per market in each season.

## Key results

- The crop residues yields are presented in Figure 1. Sorghum straw yield was 8.5 tons DM/ ha and highest ( $P < 0.05$ ) of all the crop residues whereas cowpea residue was lowest (1.8 tons DM/ ha).
- Estimated quantity of available forage in grazing lands differed significantly ( $P < 0.05$ ) across seasons (Figure 2). Early dry season had the highest value of 3.08 tons DM/ha and early wet season recorded the lowest (0.56 tons DM/ha).
- The feedstuff sold in the emerging feed markets are in Plate 1. Groundnut and maize bran were the commonest feed in all the markets surveyed.
- The mean price (GHS 1.00 /Kg DM) of cowpea haulm was highest ( $P < 0.05$ ) and rice bran had the lowest price (GHS 0.12/Kg/ DM). Generally feed prices were higher ( $P < 0.05$ ) in early and late dry seasons.

## Significance

Evaluation of feed resources helps to guide the development of effective strategies to improve nutrition, feed use efficiency and livestock productivity based on locally available feed resources.

## Scaling potential

Hundreds of households can benefit from feed packages based on locally available feed resources for improved ruminant production and can also take advantage of opportunities of emerging feed markets to increase their income generation and food security.

## Partners



We thank farmers and local partners in Africa RISING sites for their contributions to this research. We also acknowledge the support of all donors which globally support the work of the CGIAR centers and their partners through their contributions to the [CGIAR system](#)



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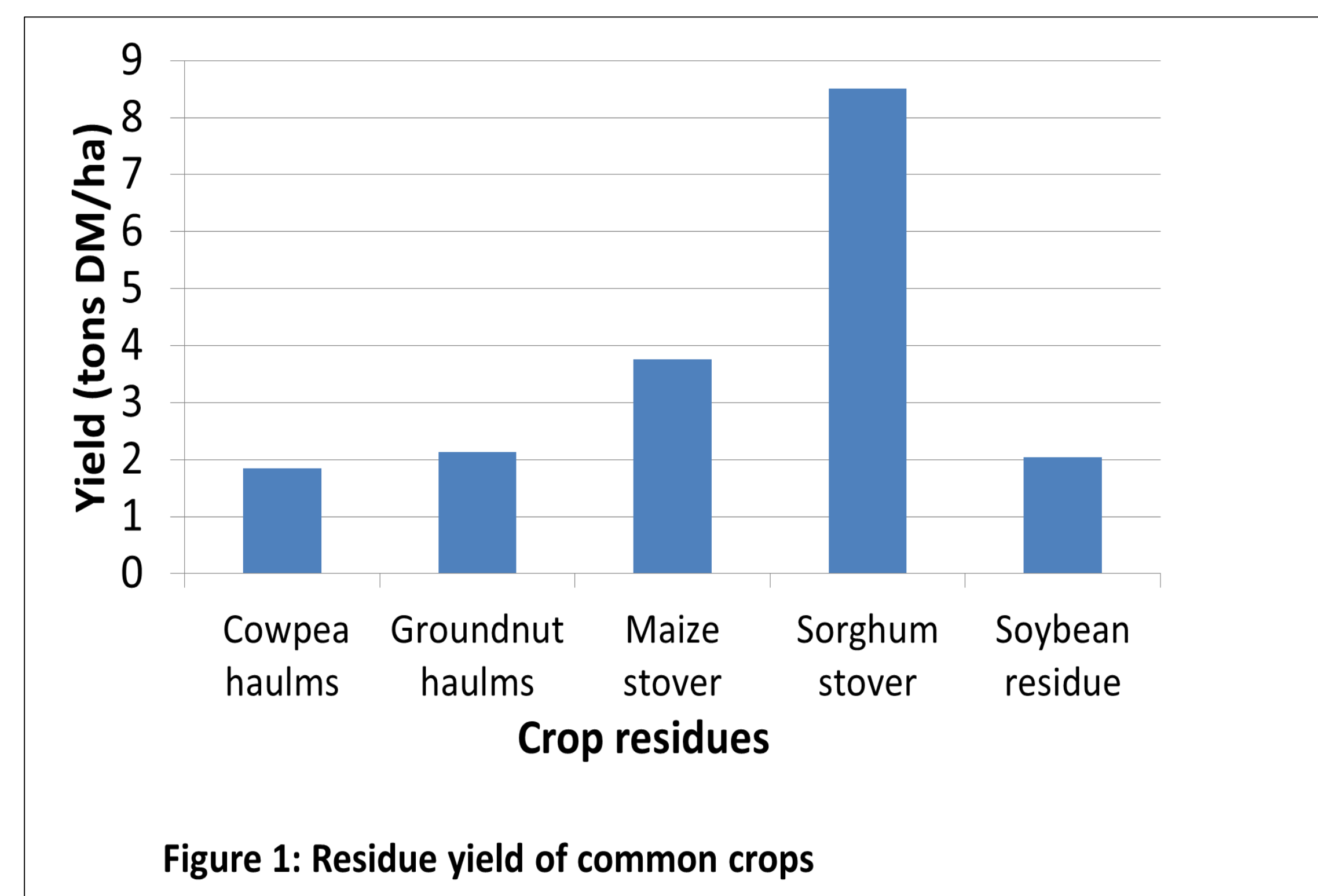


Figure 1: Residue yield of common crops

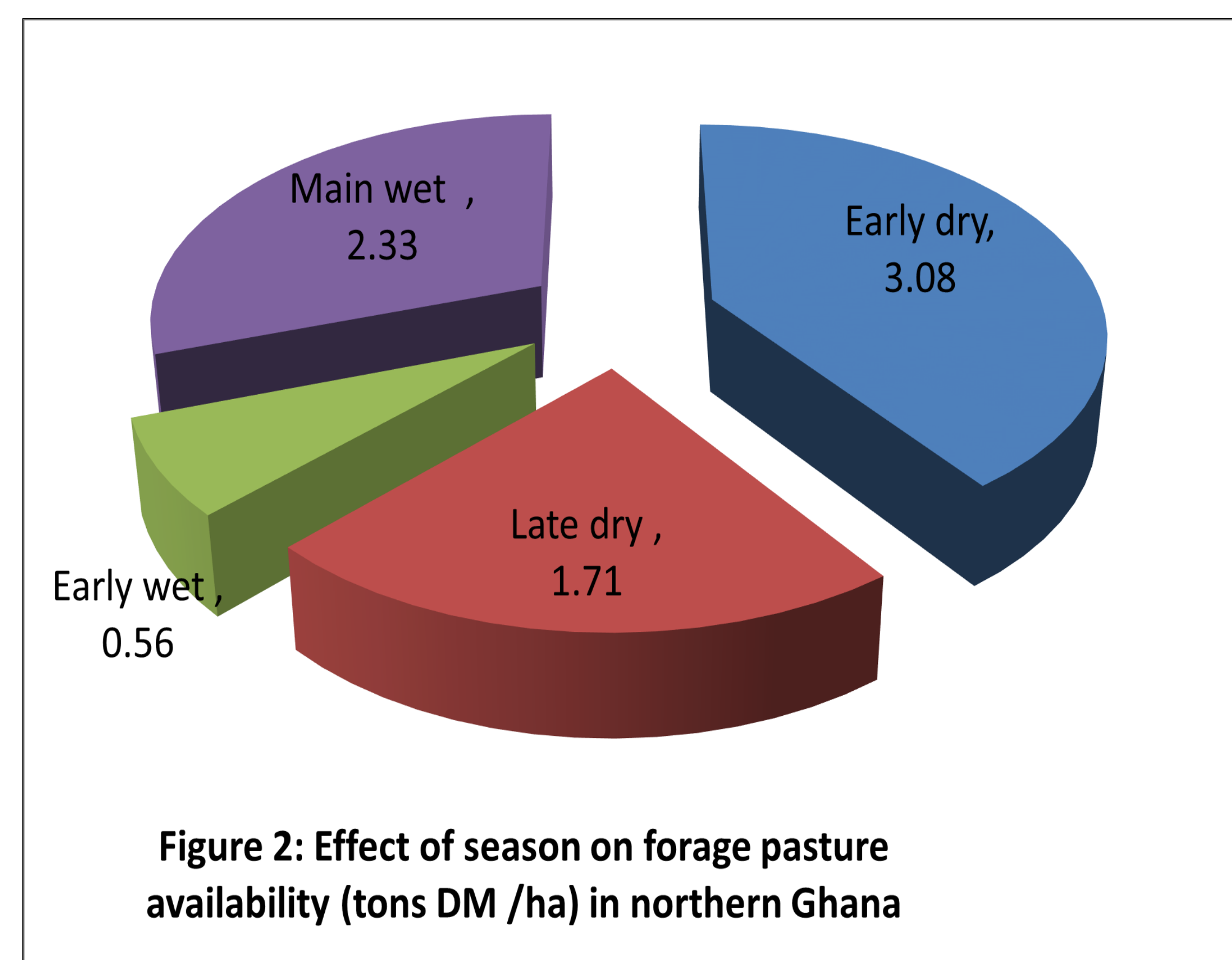


Figure 2: Effect of season on forage pasture availability (tons DM/ha) in northern Ghana



Plate 1: Assorted feedstuffs on sale at the feed markets