

Feed, Land, and Landscape for Sustainable Animal Production

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ABSTRACT: Livestock is the world's largest user of land resources, with grazing land and cropland dedicated to the production of feed representing almost 80 % of all agricultural land. For sustainable animal production, the discussion of the relationship between livestock, feed, land and land use systems is therefore inevitable especially in the face climate change and variability. Livestock consume pastures, cereals, legumes and by-products and directly impacts on lands through actions such as compaction. They also produce manure and urine that contribute to maintenance of soil fertility and therefore enhance land and land use systems. The livestock produce greenhouse gases and contribute to climate change. Sustainable use resources especially land to support animal production through production of feed is paramount. With the increase in human population and economic growth which has increased preference for animal products, the need for more animal products is higher than before. There is also intensification of monogastric animals which demand for more concentrates compared to pastures that are required for ruminant production. A balance of livestock feed production and land use systems are therefore important for sustainable livestock production. The papers suggest a holistic system in addressing the challenges facing the sector for sustainable animal production.