

Article title	Building Bridges between Natural Nutrient Sources and Fertilizers for Soil Health and Sustainable Food Security
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Abstract	A common piece of land served the purpose of arable farming and animal rearing; crop residues and animal dung and excreta enriched soil fertility. The adoption of green revolution (GR) technologies embodied in improved seeds and fertilizers accelerated growth in global food grain production from 0.9 billion tons (giga (G) tons) in 1961 to 3.1 G tons in 2017. Plants grow by capturing, absorbing, and drawing essential mineral nutrients from diverse sources and resources. Organic manures constitute plant (crop residues) and animal wastes (animal dung) including the by-products obtained after processing their economic parts. Crop residues are largely applied by incorporating or left on the surface to rot. Fertilizers are synthetic chemicals or available from mineral sources. The centrally planned economies (CPEs) of Eastern Europe and Eurasia (then the former Soviet Union) also promoted growth in fertilizer use for food security reasons.
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