Potassium fertilisers and development: review of major approaches to improve supply

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Abstract

The paper aims to review major approaches to improving potassium fertilizer supply in developing countries and discusses the constraints of the two dominant food system paradigms, industrialized and closed system production, in securing fertilizer supply.

The paper describes the current global supply of potassium fertilizers and approaches to improving the supply based on the review of existing literature and industry reports. In order to outline the approaches to supply of potassium, the paper utilizes both supply chain perspective (Marsden et al, 2000; Sonnino and Marsden, 2006) and global production network view (Coe et al, 2008; Bridge, 2008; Dicken, 2011; Santos et al, 2015).

The paper discusses how two food systems, industrialized and closed system production, experience difficulties in combating structural limitations of producing organic and inorganic potassium fertilizers for food production. It suggests developing a hybrid system, where capabilities of private actors to supply potassium fertilizers can be utilized for serving the needs of large-scale and small-scale food production.

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