The soil sciences in India: Policy lessons for agricultural innovation

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Abstract

There is increasing demand for institutional reform in the agricultural sciences. This paper presents lessons from the content and directions in soil science research in India, to make a case for institutional reform in the agricultural sciences. It demonstrates how existing institutional and organizational contexts shape the research content of the soil sciences and its sub-disciplines. These contexts also shape the capacity of the soil sciences to understand and partner with other components of the wider natural resource management (NRM) innovation systems. The professional association has received little attention in the innovation systems literature, even within the nuanced, context specific and historically sensitive accounts of innovation. As a professional association, the Indian Society of Soil Sciences (ISSS) plays a limited role currently, with little engagement with the key professional and social issues that confront the soil sciences. The ISSS is presented here as a potential actor in the NRM innovation systems. The paper argues that with the involvement of the ISSS, the existing discipline-based, commodity oriented, linear and instrumentalist problem solving approach in the soil sciences can be reformed to a learning and partnership based innovation systems approach, enabling professional excellence, field level technology utilization, along with substantial policy and donor support.

Keywords: Institutional reform; Innovation system; Professional association; R&D policy; Soil sciences