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23

Lowland Ecosystem Management in Agricultural Sustainability

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Abstract

Rainfed agriculture plays and will continue to play a dominant role in providing food and livestock for an increasing world population. Rainfed agriculture practiced on 80% of the world's agriculture land area and generates about 70% of the world's staple food including most of the food in poor communities in developing and least favoured areas. The most recent estimates have put global rainfed croplands at 1.75 billion ha (Bha) at the end of the last millennium, or about 5.5 times the irrigated area in the world. India ranks 1st among the countries that practice rainfed agriculture both in terms of extent 86 (mha) & value production. Agriculture water management deals with the administration of a key input to agricultural production & offers to hope that land and water use will be intensified. Scarcity of water resources and growing ofm competition for water many sectors reduces its availability for irrigation. Effective management of water for crop production in water scare area requires efficient approaches for increasing crop productivity and drought tolerance by genetic improvement and physiological regulation may be the means to achieve efficient & effective use of water. A single approaches would not be able to tackle the forthcoming challenge of producing more food and measures with engineering solutions (water saving ,irrigation method, deficit irrigation, proper deficit sequencing, modernization of irrigation system etc) and agronomic & soil manipulation (seed priming)\ seedling age manipulation, direct or wet seeded