

## **Soil erosion in Dera Ismail Khan, Khyber Pakhtunkhwa (NWFP): Problems and Potential solutions**

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Soil degradation and loss of nutrients as a consequence of water erosion may lead to catastrophic situation for growing crops in the arid regions of Pakistan. Growing interest to conserve socio-agro-ecosystem and preserve water resources of arid regions to avoid food scarcity in the world remains a challenge for the scientific community. Water is the primary agent of erosion in Pakistan with the province of Khyber Pakhtunkhwa among most affected. Soils of Dera Ismail Khan are broadly categorised into piedmont and alluvium soils. Textural map of arid region showed that the piedmont soils are sandy whereas the soils derived from alluvium occupying most of the central part of the area and along the Indus River is sandy loam and soils further away from the river are clayey loam whereas soils found towards the north of the area are silty loam in texture. Almost 60% of the area is barren whereas as 25% of the area is under intensive cultivation of dates, mangoes and general crops. Here soil erosion in the region is discussed and possible remedies are presented for minimizing soil erosion and rehabilitation of eroded lands.