

SALT-AFFECTED SOILS: OPTIONS FOR REHABILITATION

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ABSTRACT

Salt-affected soils are common in countries situated in arid and semi-arid regions, and seasonally dry tropical climates. Pakistan is situated in the same region. Economic use of salt-affected land has a special relevance to Pakistan where heavy pressure is on its natural resources because of increasing population, and where about 6.8 million hectares are salt affected. Of which only 3.16 million hectares are within canal command. Country experiences huge recurring losses because of reduction in yield due to soil salinization and water-logging as well as of its ill effects in terms of deteriorated social life. According to an estimate the reduction in yield on moderately salt-affected soils for various cereal and cash crops is 60–70% causing a loss of about one billion \$US per annum. An expenditure of over 90 billion rupees (approximately 3 billion \$US) has been incurred to control water-logging and salinity through large engineering projects, yet the problem is still existing while scarcity of fresh water has further aggravated the situation. Reclamation of salt-affected land not existing in the canal command is out of question. Where as in the other cases, it is expensive. Rehabilitation of these adverse soils through site-specific reclamatory/managerial approach is discussed. It is worth mentioning that integrated approach of irrigation and drainage management and saline agriculture is required to combat against the problems of salinity/sodicity in order to meet the challenges of heavy pressure on natural resources for livelihood and to alleviate poverty of the farming community: a consequence of land degradation.