Knowledge Portal for Rainfed Farming Systems and Watershed Development: A step towards maintaining agricultural output and food production in India*

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Abstract

The Government of India's Common Guidelines for Watershed Development Projects (2008) states that “Rainfed areas of 85 million hectares out of the 142 million hectares of net cultivated area, have suffered neglect in the past, and the challenge in rainfed areas, therefore, is to improve rural livelihoods through participatory watershed development with focus on integrated farming systems for enhancing income, productivity and livelihood security in a sustainable manner”. A close analysis of various types of rainfed situations would reveal that soil and water conservation, watershed development and efficient water management are the key to sustainable development of rainfed areas. The Watershed Approach (i.e. hydrological unit) has been accepted as a major theme for development of rainfed areas with a view to conserving natural resources of water, soil and vegetation by mobilizing social capital. The Common Guidelines advocates “creation of a National Portal to host the data generated from all watershed projects in the entire country”.

The National Watershed Development Project for Rainfed Areas (NWDPRA) of the Central Department of Agriculture & Cooperation (DAC) has been operational since 1990-91 in 25 States and 2 Union Territories. During the Tenth Plan, DAC launched its programme titled “Development of Agricultural Informatics and Communication (DAIC)” in various agricultural sub-sectors viz., Seed, Rainfed Farming, Watershed Development etc., which impact Indian farmers. Under the DAIC Programme, project initiatives were undertaken to develop a “Knowledge Portal on Rainfed Farming and Watershed Development” (http://www.dacnet.nic.in/rfs), by both DAC and NIC. This Portal is a developmental gateway for maintaining agricultural output and food production in India, and has developmental information about 12000 Watersheds, taken up for development under the NWDPRA Scheme.

This paper discuss further roadmap for mainstreaming ICT, development of Decision Support System (DSS) based on both spatial and non-spatial information, and Web Services for information access in 22 Indian Languages, so as to enrich the Knowledge Portal.

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