



RESEARCH PAPER

Groundwater depletion in Haryana: A challenge

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Abstract : India is the world's largest user of groundwater with over 80% of the rural and urban domestic water consumption met by available groundwater, but every year the water table is depleting in different states of the country. There are total 141 blocks in Haryana, out of which 86 blocks (61% of the state's geographical area) had reached the red zone due to groundwater exploitation. In year 2004, 55 blocks were under the red category zone, which means that 31 more blocks have come under the distressed category in a decade and a half. The depletion in the water table is now a cause of concern in 14 of the 22 districts of Haryana and mainly Ambala, Kurukshetra, Kaithal, Karnal and Panipat are the worst affected. In the absence of adequate surface water quantity, groundwater has become the main sources of irrigation in the state and the total geographical area of Haryana is 44,212 Sq. Km and out of which cultivable area 36,760 Sq. Km (83.15%). The total area under irrigation is 29,740,000 ha (81%) i.e. by Canals 11,530,000 ha (38.80%) and by tube wells 18,210,000 ha (61.20%). Net Area Irrigated is 29,740 Sq. Km. This has resulted into excessive exploitation of groundwater resources. The indiscriminate withdrawal of groundwater has created a declining water table situation in the state. The average rate of decline over the last 48 years has been about 24 cm per year. In addition, fourteen districts out of twenty two have been categorized as over exploited. This paper, therefore, attempts to analyze the problem of declining water table, factors for its depletion and suitable mitigation measures to combat the declining water table problem for sustainable agriculture development in the state.

Key Words : Groundwater depletion, Degradation, Sustainable agriculture

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