

Integrated Micro Watershed Management

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Abstract—The continuous growth in Indian population (1210.19 million in the year 2011 with 17.64% decadal growth rate in 2011) and rapid urbanization (31.16% in 2011) has diabolically increased the demand of fresh water for various activities. In addition to the existing settlements many new physical developments like townships, industrial units, academic campuses etc are taking shape with all new modern infrastructure and amenities. These physical developments are radically dependent on available proximate water resources and at times distant reservoirs. In many cases these developments are creating conflict amongst all the concerned stakeholders. To overcome such scenario there is a need to understand the availability of water on the surface and below the ground level with the help of pragmatic analysis of macro as well micro watersheds. Watershed is a natural system which functions in a manner to collect, store, and discharge water to a common outlet, such as a larger stream, lake, or ocean. The quality and quantity of surface runoff and the ground water in the particular watershed depends on the climate, geographical and geological profile of the land and the vegetation. For sustainable development the integration of watershed planning and physical planning process on macro as well as micro level is essentially required to ensure the availability and quality of fresh water as per the prescribed standards. Traditionally India has region specific practice to develop the settlements in conformity with the water bodies Unfortunately in modern planning system this fundamental practice has been overlooked which is resulting in water scarcity and quality degradation of fresh water in various parts of the country. Many scientific studies of urban disasters are now endorsing that we must admit this fact and should plan in accordance with the watershed. The paper explains one of the processes' adopted for Integrated Micro Watershed Management for 518 acre campus of Central University of Rajasthan at Bandarsindri, Ajmer, Rajasthan.