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Some Aspects of Water Resources Management in Arid and Semi-Arid Regions, Case Study of Western Iran

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Abstract : Water resource management is of global significance as it plays a key role in the socioeconomic development of all nations. On account of the fact that Iran is situated in a highly pressurized belt in the world, precipitation is limited, so that the average annual precipitation in the country is about 250 mm, only about one third to one quarter of the world average for rainfall. Karkheh basin is located in the semiarid and arid regions of Western Iran, an area with severe water scarcity. 70 % of rainfall is directly evaporated. The potential annual evaporation of the southern and northern regions is 3,600 mm 1,800 mm, respectively. In this paper, Some aspects of water resources management for this region, the specifications of the Karkheh reservoir dam & hydroelectric power plant as the biggest dam in history of Iran with total volume of reservoir 7.3 Bm3 are illustrated. Also the situation of water availability in the basin, surface and groundwater potential are considered.

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