Water resources and management in Libya

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Abstract Libya is one of the driest and semi-driest regions in the world, with small total annual rainfall and high evaporation rates. No significant surface water resources are available; groundwater is the main source of water. To face these water problems, Libya built-up a large project designed to transfer freshwater from its southern parts to the northern parts. This paper investigates the current water supplies, demands, the necessity for a water management system, and the future prediction of water demands until the year 2020. The results show that the present water production at the present demand rates are only enough until the year 2012, and the country should have a new policy for producing more water, with a water management system sufficient to meet its future demands for water. Desalination water from the Mediterranean Sea seems to be the first priority for Libya in future.

Key words Libya; water; management; agricultural demand; domestic demand; industrial demand; future; resources; supply