Water and Development in Brazil

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The Brazil is reasonably well endowed with water when compared to many other countries. Average annual rainfall over 90% of the territory ranges between of 1000 to 3000 mm, which results in a significant water surplus. The average river discharges of 177,900 m^3/sec represent about 35,000 m^3/yr per capita. Moreover, aquifer recharge rates of 2522 km^3/yr - stored volume of 112,000 km^3 - represent a sustained water resource of at least 5,000 m^3/yr per capita. Because global market key word is to get more money per available drop water under sustainable conditions - ethic, ecology and economy - groundwater is increasing in importance in Brazilian water supplies, in part as a response to the growing costs and other constraints in storing and treating surface water and partly because the advantages of groundwater are now better understood. The importance of groundwater to national development is, however, not yet fully appreciated, certainly because it is not as photogenic as surface water reservoirs and others extraordinary constructions. Nevertheless the considerable variations between and within regions in water quantity, quality and use, groundwater may be important source for urban and livestock water supplies, base flows to rivers, and in contributing to lake and wetlands water balance and ecology. An efficient water use and the deterioration of its quality are still factors that threaten to constrain economic and social development in many regions of Brazil.