

## E/CONF. 70/ABSTRACT 27 GROUND WATER RESOURCES OF THE SUDAN

R. B. Salama  
By the Government of the Sudan

The present minimum annual requirements of water for the human and animal population in the rural areas of the Sudan is estimated to be 275 million cubic metres. The ground-water basins provide 23.2 per cent of this amount at present.

Some 1,381 million cubic metres are estimated to recharge the major basins annually; only 143 million cubic metres of this recharged water is used.

The ground-water resources (reserves) are estimated to be 41.8 billion cubic metres.

It can be concluded that the ground-water potentials of the basins are extremely high. Large quantities of ground water are available for the future development of irrigation and domestic supplies.

## E/CONF. 70/ABSTRACT 28 EVAPORATION IN THE SUDAN

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Evaporation is measured using the standard class 'A' pan and the Piche tube. Both instruments give higher values of evaporation in the dry season owing to advection.

Estimation of evaporation using the Penman formula has proved to be more useful. Some of the original constants in the Penman formula have been changed to suit local conditions.

Ratios of Penman have been established for the different regions of the country. These ratios depend on the relative humidity. Records of the Piche tube are now used in conjunction with these ratios to provide better estimates of evaporation.

The annual evaporation in the Sudan ranges from 2,800 millimetres in the desert north to 1,800 millimetres in the wet south. The maximum daily evaporation is 9.9 millimetres in April in the north, while the minimum is about 4 millimetres per day in December in the Red Sea region.

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