

Effective Utilization of Available Water Resource by Following Proper Irrigation Practices in Sri Lanka

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Abstract — Sri Lanka is a pearl shaped island situated about 35 km. from the southern tip of India. It is exactly 880 km. north of equator and this land of 65,610 sq. km is only 435 km. long and 225 km. across it's widest. Monsoon rains occurring during the two distinct periods from May to September namely the South-West Monsoon and from December to February the North-East Monsoon along with the convectional and depression rainfall during the inter monsoonal periods contribute to the annual precipitation. Sri Lanka is divided into 103 natural river basins, with catchment areas ranging from 10 to 10,500 sq. km. Sixteen of these rivers flow through the wet zone. The base flow of these perennial rivers of wet zone are very low and flood discharges are high. The streams in the dry zone have poor run-off and are generally not perennial. The annual precipitation is about 110,000 million cu. meters, the run-off being 47% of this. The wet zone contributes 40,000 million cu. meters of perception of which the run-off is 65%. The practice of irrigation in Sri Lanka has a tradition of over two thousand years, with the first earth dam believed to have been constructed in 504 BC. The earliest settlers from India in Sri Lanka possessed a knowledge of irrigation and rice cultivation, having presumably settled on the flat dry zone plains which were ideal for rice cultivation. This research article deals, how the water resource is effectively utilized by following systematic scientific and proper irrigation practices in Sri Lanka.