## Water Conflict Resolution in Multiple User Scenarios in Mahakanadarawa Scheme in Sri Lanka

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Abstract —Sri Lanka is an agriculture based developing country and currently Anuradhapura district provides the large contribution to the national economy through food production. The Mahakanadarawa irrigation scheme situated in east side of the A9 road, nearly 20km from the heart of the Anuradhapura city. This scheme has 126 Sqmls catchment and 36250 Ac ft. capacity. This scheme is the back born of the livelihood of around 5237 farmer families. The main income of these people is agriculture. Most of the farmers usually do paddy cultivation. Out of 6100 Acres the full extent cultivated in maha season and nearly 1500 acres cultivated in yala season. The cultivation of yala season reduces due to water shortage. The inflow of Mahakandarawa based on seasonal rain and inflow from Eruwewa .The Eruwewa Mahakandarawa feeder canal is not properly working due to poor maintenance and partially completed construction. This leads miss calculation on the estimation of the inflow from the Eruwewa clearly. The government and scholars identified some kidney disease spread areas far downstream of Mahakanadarawa scheme. Rambewa, Medawachchiva, Kebithigollawa etc. The major reason for this problem identified as the drinking water quality. The ground water of this area is highly polluted with the heavy material. Therefore the importance of the treated surface water become necessary. The government also announced to give the first priority to Drinking water. There is water shortage in Yala season in every year. The demand of drinking water makes another dimension to water sharing between the multiple users and emerging as bigger social problem. To address this problem a study incorporating, the agriculture pattern, and water balance of irrigation scheme and attitudes of people towards water management and reduce of the water wastage in this scheme is going on. This article spells out the importance, initial groundwork, the methodology of this curtail needy research study on socio engineering intervention of a social problem.