

FROM THE EDITOR...

Kelani river starts at the confluence of the Kehelgamu Oya and Maskeliya Oya originating from the mountain range of Kirigalpotha at the elevation of about 2400 m from MSL. With a catchment area of 2,339 km², the Kelani river basin is the seventh largest river basin in Sri Lanka. With the Kelani river basin being one of the wettest areas in the country, flooding is the main concern for the basin. Drought as such is usually not a significant concern for the most part of the year.



The Mahaweli river has a drainage basin of 10,448 km², the largest in the country, which covers almost one-fifth of the total area of the island. It includes several trans-basin diversions to make water availability in dry zones in off season and will have diversion to several river basins such as Kanakarayan Aru, Ma Oya, Malwathu Oya, Pali aru, Parangi Aru and Yan Oya. Further, Maduru Oya reservoir presently receives supplementary flows from Mahaweli river via a link tunnel from Ulhitiya-Rathkinda twin reservoirs which get Mahaweli water diverted at the Minipe anicut through the Minipe right bank (RB) trans-basin canal. It needs additional 141 (Million Cubic Meters) MCM water in the month of June for cultivation in its RB. However, Mahaweli river does not have adequate water for these diversions. As such, Mahaweli river basin is in deficit of water in dry season. Additional Mahaweli water is needed to feed the newly developed Mahaweli zones in the northern and north-eastern areas of the Sri Lanka. As such, feeding of additional water would make Mahaweli river basin more reliable and sustainable with present and future needs.

Recently, it has been discussed and proposed to construct a tunnel connecting Kelani and Mahaweli basins to reduce water resource shortage in Mahaweli basin. As water goes to the sea in the south-west monsoon season, about 100 MCM water can be diverted from Kehelgamu Oya to the Mahaweli river without any objection. About 75 MCM from Norton bridge reservoir could also be transferred in low flow season. The total of about 175 MCM could be transferred annually by constructing a 6 km long tunnel. Further, Mahaweli river basin also needs to be able to store that water in its system. Therefore, another project aiming the raising of Kotmale dam and few dams in upper catchment have also been proposed. For this diversion, the capacity of reservoirs needs to be verified with planned operation and regulation.

This water diversion project will provide additional water required for water supply distribution and development of irrigation schemes in the drier areas in the north of Sri Lanka. Therefore, it is possible to improve the sustainability and reliability of the Mahaweli Project.

With the proposals as the diversion of Kelani river water to Mahaweli river, the reliability and the sustainability of Mahaweli river basin can be improved. It would serve as a major trans-basin water management system in Sri Lanka in recent time and definitely benefit the farmers in the dry zone.

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