

FROM THE EDITOR...

The Maduru Oya reservoir was planned with the intention of providing irrigation facilities to downstream areas in left and right banks of Maduru Oya reservoir in "System B" comprising 37,000 ha of net irrigable area. The construction of Maduru Oya reservoir was completed in 1982 with the financial and technical assistance from Canadian International Development Agency (CIDA). The mean annual flow to the reservoir from its own catchment is estimated as 380 MCM and the reservoir is being augmented with Mahaweli water diverted at Minipe through trans basin canal to Ulhitiya - Rathkida twin reservoir and then to Maduru Oya through a 5 km long link tunnel. The construction of irrigation and social infrastructure in left bank area was about 90 % completed by mid - nineties.



Government of Sri Lanka (GoSL) formally requested World Bank for assistance in financing the "System B" right bank (RB) development in 1983. An appraisal mission visited Sri Lanka in mid-1983 and appraisal report was released in May 1984. The report proposed a five year implementation programme with work on the main and branch canals commencing in 1985 with funding from the Saudi Fund for development (SFD), CIDA and the GoSL. SFD was to fund about one third of the cost of right bank development. However, the work could not be commenced in 1985 as expected as it was found that the assistance expected from the SFD for main and branch canals was not forthcoming. In order to realise the full benefit of the past investments on Maduru Oya reservoir and associated diversion facilities, RB areas should also be developed for irrigated agriculture. With that intention, construction of Maduru Oya RB canal was started in 2021 with GoSL funding worth LKR 38, 500 million and the expected duration is 11 years.

The Maduru Oya RB comprises a gross area of 44,532 ha and a net irrigable area of 15,000 ha as per the feasibility report prepared in 1980. The Maduru Oya RB development project is located within the lowest peneplain of the country, having a vast flat plain with number of scattered inselbergs. The project area lies along the right side of the Maduru Oya reservoir, and is bounded on the east by a branch of the Maduru Oya (Manturai Aru and Kiriwe Aru), on the south east by the Miyangolla ela and on the north and west by the Maduru Oya and on the south by Maduru Oya reservoir and Nagolla Dee Kodiune tank. The main canal with a design capacity of 18.7 m³/s, will traverse about 34 km north of the Nelugala area. Four branch canals and two sub-branch canals are planned for the project. With the construction of RB canal, GoSL expects to upgrade livelihoods of nearly 40,000 families and it would be another major leap forward in country's illustrious irrigation history.

Eng. (Dr.) P.A.K. Karunananda
BSc. (Eng.) (Hons.) (Peradeniya), MPhil. (Peradeniya), MEng. (Ehime),
DEng. (Ehime), C.Eng. MIE(SL)
Editor, 'ENGINEER', Journal of The Institution of Engineers