Minipe anicut is an ogee type concrete gravity structure having a length of 225 m and a maximum height of 13 m at the crest elevation of 114.00 m MSL. It was built across the Mahaweli river by ancient kings and subsequently developed at different times during the period spanning from 1939 to 1984. Minipe anicut is the second major diversion point of the Mahaweli Ganga Development Programme. The irrigable area of the Minipe anicut lies along the left bank of the Mahaweli river starting from the Minipe anicut which is the head work for the system and extends up to Wasgamuwa National Park with a total extent of 6107 ha. The trans-basin canal starting at the right bank end of the Minipe anicut provides water to systems B & C of the Mahaweli development area.

Minipe pool, having a storage capacity of 0.18 MCM, is the only regulatory reservoir for the Minipe LB and RB canals that have design discharges of 22 m³/s and 64 m³/s, respectively. Minipe LB canal intake is located at a higher elevation (about 0.7 m) than the RB canal intake. As such, the major portion of water at Minipe pool will flow in to the RB canal. This has resulted in an irregular flow in the LB canal that fluctuates within a range of about 75% of its design discharge, resulting in water deficits in its command area, especially at the tail end of the canal.

Therefore, the Ministry of Mahaweli Development and Environment (MMDE) proposed to undertake the project with the aim of addressing this pressing problem by introducing a number of improvements to the Minipe anicut and Minipe LB canal that will increase the water retention ability of Minipe pool as well as enhance the water conveyance capacity of the Minipe LB canal.

The objective of addressing the water deficit in the LB command area will be achieved through two activities. First, the storage capacity of the Minipe pool will be increased by a further 1.1 MCM, through raising the Minipe anicut from its current FSL of 114 m MSL to 118 m MSL. This would effectively reduce the flow fluctuations in the Minipe LB canal by diverting a higher volume of the water released from Rantambe reservoir after power generation. Second, LB canal will be rehabilitated to improve its conveyance capacity, which includes desilting of the canal, removing the water weeds, lining selected sections of the canal, providing cross regulators, adding water measurement devices to distribution and field canals and reinstating the canal to its original condition. The Minipe anicut heightening project was inaugurated on 15th October 2023. The project would upgrade the productivity of Mahaweli System B & C future.

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