History Notes

In 1885, a masonry dam of one metre height was built across Riviere du Tamarin in the marshy land at Mare aux Vacoas draining an area of 13 km².

The purpose of the dam was to store water for domestic water supply. That was how the Mare aux Vacoas Dam has come into existence.

In 1892, the level of the dam was raised to an elevation of 558.54 m (amsl) and the capacity of the reservoir to 2.58 Mm³. In 1915, after a prolonged drought, the level of the dam was raised to an elevation of 560.06 m and the storage capacity to 5.27 Mm³.

In 1922, Tatamaka feeder canal was constructed to divert water from Riviere du Poste into the MAV reservoir. The carrying capacity of the canal is presently 4.25 m³/s and the annual contribution is of the order of 15 Mm³.

In 1928, with the contribution of the Tatamaka Feeder Canal, the reservoir capacity was further raised to 16.15 Mm³, and finally in 1961 to 27.63 Mm³ with a water spread area of 5.6 km².

In 1971, Parc aux Cerfs Canal was constructed to divert flow from the upper catchment area of River Citron and North East part of the local catchment. The average annual contribution of the canal is 1.75 Mm³.

In 2002, the Pradier Canal was constructed to increase the inflow into MAV reservoir. Its annual contribution is estimated as 4 to 5 Mm³.

Contribution of local reservoir catchment is estimated as 11 Mm³/year.

A hydrographic survey of the reservoir was carried out for the first time in the year 1996, and the gross storage capacity of the reservoir determined as 25.89 Mm³.

The dam was comprehensively rehabilitated in the year 2000.

Salient features of MAV Dam

Location : Across marshy area, called Mare aux Vacoas in the district of Plaines Wilhems and about 25 Kms South of Port Louis

Year of Construction : In 1885, height and capacity increased in stages (in 1892, 1915, 1922, 1928, 1941) and finally in 1961

Catchment Area : 19.50 km²

Mean Annual Rainfall : 3330 mm

Regulated Yield : 33 Mm³/year approx.

Reservoir Capacity : 25.89 Mm³ after hydrographic survey of 1996

Maximum water spread area : 5.6 km²

Full Reservoir Level : 566.35 m amsl

Feeder Canals : (i) Tatamaka canal (1922), capacity 4.25 m³/s

(ii) Parc aux Cerfs Canal (1971), capacity 9.5 m³/s

(iii) Pradier Canal (2002), capacity 2.63 m³/s

Feeders in local catchment : (iv) Ruisseau Gros Cerfs

(v) Gros Ruisseau

(vi) Grand Ruisseau

Type of Dam : Cogliano and Tamarin dams are homogenous earthen embankments Mare Soulier Spillway and Second Spillway dams are of masonry

Maximum height of dam : - Cogliano : 10 m;

- Tamarin : 11 m;

- Mare Soulier : 6 m; and

- Second Spillway dam : 3.5 m

Length of Dam : 2948.50 m

Width of Spillway : 1063.5 m

Purpose : Potable Water Supply
Fig. 5.2 Daily and Normal Storage Variation for Mare Aux Vacoas