(1)

The water accounting method should be introduced in all canal command areas to improve the water use efficiency in the country. Explain.

"India has one of the Largest canal irrigated area in the world. But, there is ~~recent~~ issue of decline / slowdown in the area. critics comment - 'throwing good money after the bad'

Why such criticism?

Idea of Irrigation started in idea from 1950s & 60s after independence.

1st 5 year plan ⇒ 85% of investment went only for Major canal irrigation eg: Bhakra Nangal dam

This spirit, was carried on till 11th FYP. of total ≃ 73% investment done on irrigation till 11th FYP

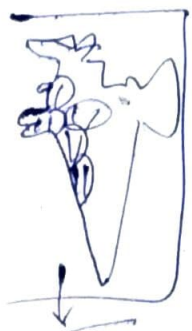
Effects.

Dams surged from 55 to ≃ 5400. (2018)

73 dam / year. Storage capacity ↑ to 304 bn. (ha)

1990-91 (After)

Irrigated area started to slowdown after 1990-91 but the area has increased since independence. The decline is not uniform.



These areas showed decline in Irrigated area

These area showed increase in Irrigated area

Why there is decline in Area?

Data problem:

Huge difference between data released by M/o Agri & CWC.

canal irrigation scheme → the irrigation has to be used only for certain crops for certain % of area.

But this notional cropping pattern rarely followed

Government also had not released any gross irrigation area data

Growth factor

Increasing Economic growth, Urban agglomeration.

eg: Water diversion from Khadakvasla dam to Pune city.

Water Intensive crop

Headstream farmers → High water usage for paddy, sugarcane etc, leaves inadequate water to Low stream

eg: World bank → sugarcane only 3% area (Mah) but 2/3rd water is consumed.

Investment

Poor financial outflow. but it is yet to study whether 'throwing good money after bad' is really true.

Water accounting method (WAM) is the need of hour., with available data. One Success story of Maharashtra WAM as increased water use efficiency highly. It not only increases efficiency, but also tells us the usage of water and, Sustainable use in future.