## Executive Summary

Rajasthan has one tenth of land area and five per cent of population of the country. However, its share in surface water resources is below two per cent. Agriculture remains a major occupation for the population of the state. Out of the total irrigated land of State, 69 per cent is irrigated through tube wells and open wells, placing enormous stress on ground water. In contrast, the share of surface irrigation in total gross irrigated area was only 31 per cent. Optimum use of surface water, therefore, assumes tremendous importance in the State. A performance audit on "Outcomes in Surface Irrigation" was conducted to assess the outcomes achieved in Surface Irrigation Projects being implemented in the State.

We noticed deficiencies in planning of projects. Inaccurate surveys led to modifications in designs after commencement of work with significant financial implications. Delayed acquisition (three to 19 years) of land resulted in avoidable expenditure of  $\gtrless$  33.62 crore.

(Paragraphs 3.1.1 to 3.1.2)

Projects were delayed by three to 39 years. There were cost overrun in all the selected projects which ranged between 2 to 3,536 per cent.

(*Paragraphs 3.2 to 3.3*)

Three projects became unviable due to deficient pre-construction survey and investigation.

(Paragraph 3.4)

In five projects, water released for irrigation was far less than that envisaged and reserved, and benefit of drinking water could also not be provided up to the level envisioned in the DPRs. In two projects, the water was released in excess than required leading to possibility of water logging and salinity.

(Paragraphs 3.5.2.2 and 3.5.2.3)

Unauthorised lifting of water from canal by nearby cultivators was noticed.

(Paragraph 3.5.2.4)

Rajasthan state was a pioneer in introducing, Participatory Irrigation Management by formulating Water Users' Associations. However, the WUAs did not function as per the expectations which led to inefficient maintenance and management of the projects. Seepages from dams, damages in canals, vegetation and silting in canals were noticed which caused significant hindrance in providing intended benefits.

(*Paragraphs 4.2 to 4.3*)

Coordination among the line departments to monitor the progress of projects was not ensured. There was no formal mechanism in place for coordination between departments or regular oversight of the project outcomes.

## (Paragraph 4.9)

Audit attempted an analysis of impact of the projects and assessment of what the projects achieved.

Four projects could not create any irrigation potential even after investment of ₹ 455.76 crore. Three projects could not utilise any IP created while the utilisation of created IP in rest of the projects ranged between 2.28 to 68.21 per cent. Thus, the projects could not provide the benefits envisaged while the cost increased manifold.

(Paragraph 5.1)

National Water Policy stipulates that water resource development projects should as far as possible be planned and developed as multi-purpose projects, with the provision for drinking water. Audit observed that only in three out of seven projects, drinking water was provided to intended beneficiaries. No water was provided to beneficiaries in respect of one project and only a part of beneficiaries were covered in respect of other three projects.

## (Paragraph 5.2)

The cropping patterns were not ensured as per projections to achieve the intended yield. Project specific training/guidance about cropping pattern/technology/upgraded seeds etc. proposed in DPR was not provided.

(Paragraphs 5.3)

Only 65 per cent physical target for plantation was achieved.

## (Paragraphs 5.5)

Key information such as preliminary survey records, data in respect of ground water and revenue for the period prior to DPR and project specific crop yield were not provided to audit. In the absence of availability of data and desired records with the Department, audit could not ascertain the project-wise comprehensive outcome precisely.

(Paragraph 5.7)