Executive summary

Audit Approach

• A Performance Audit on Surface Irrigation was conducted during June to September 2019 covering the period from April 2014 to March 2019, and by conducting test check of one completed and four partly completed major projects, nine completed Mega Lift Projects and 10 completed Minor Irrigation Projects. The Performance Audit revealed several deficiencies in the planning, implementation and monitoring of the Projects.

Financial Management

- Audit found that though the spending efficiency of the authorities of test checked projects ranged from 74 per cent to 99 per cent, a sum of ₹842.98 crore was surrendered during 2014-20 without its immediate utilisation. The surrender of funds was mainly due to delay in handing over of clear site for execution by the Department, delay in obtaining mandatory clearances, etc., as well as poor monitoring by the Department.
- There was increase in cost of the major irrigation projects between 182 and 4,596 *per cent*. Despite escalation, only one major project *i.e.* UIIP (extension) had been completed and other four major projects were in different stages of progress for which further cost escalation could not be ruled out.
- Audit noticed other irregularities in financial management such as non-receipt of central assistance, parking of funds in various banks without utilisation for which it was drawn, non-deposit and non-realisation of government revenue, non-adjustment of advances and inadmissible payment of tax to the extent of ₹2,203.84 crore.

Planning and execution of Projects

- In spite of incurring expenditure of ₹12,742.11crore in all of the test checked projects, the IP achieved was 1,22,418 ha against IP proposed of 5,02,842 ha which constituted only 24 *per cent*.
- Implementation of projects was tardy, with delays in completion of projects ranging from 13 (Minor Irrigation Projects) to 43 (Rengali Right Bank Canal /Rengali Left Bank Canal) years. The delays were attributed to shortfall in land acquisition, inability to obtain statutory clearances of forest land in advance, changes in design and scope of work, *etc*. The delays in implementation of projects together with inefficient works management led to cost overrun of projects.
- Deficiencies in preparation and processing of Detailed Project Reports
 (DPRs) such as inadequate surveys, modifications in design and scope
 of work, command area, incorrect calculation of Benefit Cost Ratio of
 the projects, inaccurate assessment of water availability, and lack of

monitoring of execution, etc., led to revision in cost estimates after commencement of work.

- Against requirement of 66,219.25 acre of private land, the LAOs could acquire 31,554.57 acre (48 *per cent*) of land despite availability of funds for the said purpose. Similarly, the LAOs of selected projects failed to alienate 7,338.60 acre of Government land against the requirement of 8,387.05 acre.
- Deficiencies in works management such as duplication of work, non-levy of penalty for delay in completion of work, irregularities in tenders, extra cost incurred due to provision of excess lead, extra cost incurred due to non-adoption of Schedule of Rates/Analysis of Rates and deviations from BIS Code etc. were noticed. The extra financial implications seen in audit were to the extent of ₹554.87 crore towards irregular/ unfruitful/ wasteful/ avoidable/ extra expenditure to the contractors.
- While mega lift projects were executed without ensuring availability of water at source, the ayacuts of minor irrigation projects were found to be overlapped by major irrigation projects due to lack of coordination between executing officers of the same department.
- In test checked projects there was significant shortfall in ayacut achieved. It was revealed that in the ayacut of all test-checked projects, only paddy was being cultivated without adoption of a multi-cropping pattern. Consequently, all major projects ran the risk of becoming economically unviable.

Efficacy of Stakeholders handholding for the sustainability of the project

- Deficiencies in participatory management as well as handholding of the other stakeholders of project works were noticed. An amount of ₹282.93 crore was deposited with Forest Department for catchment treatment plant, canal bank plantation, wild life management, compensatory afforestation etc. Utilisation Certificates for only ₹70.93 crore were received.
- In two test checked-projects non-clearance of forest land led to non-completion of works and consequent deprival of farmers of irrigation facility.
- Intensity of irrigation to be achieved through the cropping pattern assessed and proposed in DPRs by Department of Agriculture & Farmers' Empowerment was actually not implemented and only paddy was cultivated in the ayacuts.

Monitoring of the Projects

• For construction of 19 lift irrigation projects the Executive Engineer, Lift Irrigation Division, Dhenkanal was provided with ₹26.35 crore during 2004-12. Only ₹15.67 crore was utilised and 17 projects were constructed. Remaining two projects remained incomplete till September 2019. Out of the 17 projects only five were functional and

- remaining twelve remained defunct due to the thefts of spares. Non-monitoring of execution and maintenance of lift irrigations deprived irrigation to 2,200 hectare of ayacut.
- Due to sub-standard execution of construction of an aqueduct and not taking any remedial action, the acqueduct could not be utilised upto its designed capacity.
- Inadequate monitoring of functioning of Mega Lift Projects, Non-levy of penalty for delay in completion of work have also been pointed out in the Report.