- (b) if so, the details thereof; and
- (c) whether Government has any plan to fix this problem and restore the capacity of reservoirs?

THE MINISTER OF STATE IN THE MINISTRY OF JAL SHAKTI (SHRI RATTAN LAL KATARIA): (a) and (b) Central Water Commission (CWC) has conducted sedimentation assessment studies on 243 Reservoirs through Hydrographic survey and live storage capacity assessment studies of 124 Reservoirs through Remote Sensing Technique.

As per the study the Reservoirs have experienced annual rate of siltation in live storage zone in the range of 0-1% normally. Six reservoirs *viz*. Sanandro, Gujarat (57.33% in 30 years), Baira, HP (84.27% in 30 years), Mhaswad, Maharashtra (52.04% in 102 years), Kundah, Tamil Nadu (63.07% in 22 years), Nizamsagar, Telangana (60.47% in 62 years), Chandan, Bihar (52.24% in 37 years) have experienced a loss more than 50% of gross storage capacity.

(c) While designing a storage project, provision for the Dead Storage is kept to accommodate the silt coming from upstream catchment. The Dead Storage is so kept as to accommodate the silt for 100 years of project life assuming a certain design rate of siltation which is based on certain factors. Any deposition of silt in the dead storage zone does not affect the performance of the reservoir.

De-siltation of dams to increase its storage capacity is primarily the responsibility of dam owners who are generally State Governments or Central/State PSUs.

Usually de-silting of large dams is not techno-economically feasible. However, de-siltation work has been taken up at limited scale by some of the dam owners. Under World Bank assisted Dam Rehabilitation and Improvement Project (DRIP), provision has been kept for need-based de-siltation of dams.

Revised estimates of Polavaram Project

- 226. DR. K.V.P. RAMACHANDRA RAO: Will the Minister of JAL SHAKTI be pleased to state:
- (a) whether it is a fact that the Central Water Commission and Advisory Committee of Ministry of Water Resources has approved the Revised Cost Estimates of Polavaram Project at 2013-14 and 2017-18 price levels;
- (b) if so, the details thereof including difference of these two price levels on each component of the project; and

(c) the reasons which prompted Government to prepare revised cost estimates at two price levels and the Central Government's financial commitment over the project?

THE MINISTER OF STATE IN THE MINISTRY OF JAL SHAKTI (SHRI RATTAN LAL KATARIA): (a) and (b) Second Revised Cost Estimate (RCE) of the Polavaram Irrigation Project amounting to ₹ 55548.87 crore at 2017-18 Price level (PL) has been accepted by the Advisory Committee of Department of Water Resources, River Development and Ganga Rejuvenation, Ministry of Jal Shakti (formerly Ministry of Water Resources, River Development and Ganga Rejuvenation) on Irrigation, Flood Control and Multipurpose Projects in its 141st meeting held on 11.02.2019. Further, Central Water Commission (CWC) has intimated *vide* letter dated 07.05.2019 that the RCE of this project at PL 2013-14 is ₹ 54,466.1 crore.

The component-wise details in this regard are as under:-

Component	Cost Estimate (₹ in crore)	
8	2013-14 PL	2017-18 PL
Power	4,560.91	4,560.91
Irrigation and Water Supply	49,905.19	50,987.96
Total	54,466.10	55,548.87

(c) As per Ministry of Finance letter No: 1(2)/PF-I/2014(Pt) dated: 30.09.2016, Central Government is to provide 100% of the remaining cost of irrigation component only of the project for the period starting from 01.04.2014 to the extent of the cost of the irrigation component on that date. Accordingly, the RCE at 2013-14 price level in addition to RCE at 2017-18 PL has been finalized.

Reimbursement of funds to A.P. State for Polavaram Project

- 227. DR. K.V.P. RAMACHANDRA RAO: Will the Minister of JAL SHAKTI be pleased to state:
- (a) whether it is a fact that Government is going to release dues of approximately ₹ 5000 crores spent by State Government for execution of Polavaram Project;
 - (b) if so, the details thereof; and
- (c) the details of amounts claimed by Andhra Pradesh Government under various components of Polavaram Project since 01.4.2014 to till date, year-wise and amounts reimbursed and pending for release by the Central Government?