

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY

LOK SABHA
STARRED QUESTION NO - 47
ANSWERED ON 03.12.2025

DEPLOYMENT OF BARC's WATER PURIFICATION UNITS

*47. SMT. SANGEETA KUMARI SINGH DEO

Will the PRIME MINISTER be pleased to state:-

- (a) whether Bhabha Atomic Research Centre (BARC)'s low-cost water purification technologies such as Nano-Filtration Units and Domestic Water Purifiers—have been deployed in fluoride-affected or iron-affected regions of Odisha;
- (b) if so, the number of units installed during the last three years, district-wise;
- (c) whether the Government proposes to expand these technologies in rural and tribal pockets of Odisha and if so, the details thereof; and
- (d) the details of any collaboration planned with the Government of Odisha for large-scale adoption of BARC water treatment systems?

ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS
AND PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH)

(a) to (d): A statement is laid on the Table of the House.

Government of India
Department of Atomic Energy

STATEMENT REFERRED TO IN REPLY TO PART (A) TO (D) IN RESPECT OF LOK SABHA STARRED QUESTION NO.47 FOR REPLY ON 03.12.2025 REGARDING “DEPLOYMENT OF BARC’S WATER PURIFICATION UNITS” ASKED BY SMT. SANGEETA KUMARI SINGH DEO.

(a) & (b) Bhabha Atomic Research Centre (BARC) a constituent Unit of Department of Atomic Energy (DAE) has executed a pilot technology-demonstration project on deployment of water purification technologies in rural & remote locations of India. In this pilot project, BARC, through its technology licensees, has deployed low-cost membrane-based domestic water purification units, including ultrafiltration (UF) and reverse osmosis (RO) units, in two districts of Odisha in last three years. The details are as mentioned below :

1. 500 nos. of reverse osmosis (RO)-based domestic water purification units were deployed in Dist. Kalahandi, Odisha.
2. 238 nos. of ultrafiltration (UF)-based domestic water purification units were deployed in District Boudh, Odisha.

Other than the above, following community water purification units, mentioned below, were also deployed in Odisha during the last three years :

- a. 4 nos. of RO-based water purification units in District Khordha.
- b. 3 nos. of RO-based water purification units in District Mayurbhanj.
- c. 1 RO-based water purification unit was deployed in District Boudh.

(c) BARC pursues research and development for development of technologies in line with the DAE mandate. In this process, some spin-off technologies useful for societal applications are also developed. These technologies are available for transfer to the private entrepreneurs at nominal fee on non-exclusive basis for commercialization.

Currently, BARC-developed water purification technologies (covering ultrafiltration and reverse osmosis membrane technologies) have been transferred to more than 40 licensees across India for wider deployment of the technology in the country including rural and remote locations.

(d) Nil.
