

GOVERNMENT OF INDIA  
DEPARTMENT OF ATOMIC ENERGY  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 1348**  
TO BE ANSWERED ON 23.11.2016

**RESEARCH PROJECT IN GUJARAT**

1348. SHRI RAMSINH RATHWA:

Will the PRIME MINISTER be pleased to state:

- (a) the research projects implemented or in process by Bhabha Atomic Research Centre (BARC) during the last three years in Gujarat;
- (b) the amount of funds allocated in this regard;
- (c) whether BARC extends research collaboration in the field of Agriculture with Navsari Agriculture University for joint research for mangoes by using atomic methods; and
- (d) if so, the details thereof?

**ANSWER**

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

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- (a) Sewage Sludge generated at various sewage treatment plants in towns and cities produce highly infectious sewage sludge which could spread diseases. However, it is also a good source of carbon and other elemental nutrients useful for growth of plants. Radiation technology can be utilized to hygienise sludge and make it safer and a useful product for farmers and other land applications. Under a Memorandum of Understanding (MoU), Ahmedabad Municipal Corporation (AMC) and Bhabha Atomic Research Centre (BARC) have commenced the implementation of 100 tons per day irradiation facility for dry Sewage Sludge Hygienisation at Ahmedabad after obtaining all statutory approvals from Atomic Energy Regulatory Board (AERB). The project is scheduled to commence the commercial production in the last quarter of 2017. BARC is providing all technical and scientific support. BARC is already operating a demonstration sludge hygienisation facility in Vadodara since 1994 and supplying hygienised sewage sludge to local farmers. BARC has

also undertaken project and demonstrated the use of radiation grafted materials for cleaning textile dye effluents. Pilot scale facilities which are under fabrication will be installed in Ahmedabad and Surat for demonstration and evaluation of performance and economics. BARC has provided technical support for implementation of NISARGRUNA biogas plant at Gajarawadi, Vadodara for processing of carcass of dead animals in the premises of Vadodara Municipal Corporation.

- (b) Funds for the NISARGRUNA project were provided by Vadodara Municipal Corporation. BARC provided technical guidance. Funds for setting up of dry sludge hygienisation project at Ahmedabad will be provided by Ahmedabad Municipal Corporation. BARC will provide scientific and technical support. Radiation Source will be provided by Department of Atomic Energy (DAE). BARC through Board of Research in Nuclear Science (BRNS) has also funded about ₹17.30 lakh to Directorate of Groundnut Research, Junagadh for groundnut research project.
- (c) No, Sir.
- (d) Does not arise in view of (c) above.

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