

**GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA**

STARRED QUESTION NO:73

ANSWERED ON:08.08.2013

COASTAL OCEAN MONITORING AND PREDICTION SYSTEM

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Will the Minister of EARTH SCIENCES be pleased to state:

- (a) the aims and objectives of implementing the Coastal Ocean Monitoring and Prediction System (COMAPS);
- (b) the details of the findings and the data collected by COMAPS during each of the last three years and the current year, location-wise;
- (c) the details and the action taken by the Government on the findings;
- (d) whether the system has achieved the desired results; and
- (e) if so, the details thereof and if not, the reasons therefor?

Answer

MINISTER OF THE STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES (SHRI S. JAIPAL REDDY)

(a) to (e) A Statement is laid on the Table of the House.

STATEMENT LAID ON THE TABLE OF THE LOK SABHA IN REPLY (a) to (e) TO STARRED QUESTION NO. 73 REGARDING "COASTAL OCEAN MONITORING AND PREDICTION SYSTEM" TO BE ANSWERED ON THURSDAY, AUGUST 08, 2013

(a) The aims and objective of the Coastal Ocean Monitoring and Prediction System (COMAPS) program are (i) to monitor water quality parameters periodically in selected locations in the coastal waters of India with a view to understand the changes in pollution levels (ii) to develop possible prediction of pollutions levels in these selected locations to assess the state of marine environment.

(b) During the last three years and current year, the data up to 25 parameters such as dissolved oxygen (DO), nutrients, pH, Biological Oxygen Demand (BOD), plankton, benthos and pathogenic bacteria, etc., are being monitored covering different seasons at 20 locations as detailed below:

S.No Name of location 2010-11 2011-12 2012-13 2013-14

1. Vadinar Apr Apr Jan, Apr, Aug

2. Veraval Jan, Mar, Sep Jan, Mar, Sep Jan, Mar, Sep Jan, Mar

3. Hazira Apr, Sep Jan, May, Aug, Apr, Oct Feb
Dec

4. Thane (Mumbai) Jan, May, Sep Jan, May, Sep Jan, Mar, Sep Jan, Mar

5. Worli Jan, May, Sep Jan, Mar, Sep Jan, Mar
6. Ratnagiri Feb Oct Jan, Mar, Oct Jan, Mar
7. Malvan Oct Jan, Mar, Oct Jan, Mar
8. Mandovi Jan Mar, Oct Mar, Dec Mar
9. Mangalore Mar, Sep, Feb, Mar, Mar, May, Sep, Nov Feb, May
Oct, Dec Apr, Dec
10. Kochi Mar, Sep, Feb, Mar, Mar, May, Sep, Nov Mar
Oct, Dec May, Nov
11. Kavaratti Nov May, Dec Apr, Sep Jan, May
12. Sandheads Mar, Jul, Dec Apr, Jul, Oct Mar, Jul, Dec Mar
13. Hooghly Apr, Jul, Oct Jul
14. Paradip Apr, Jul, Dec Apr, Jul, Oct Mar, Jul, Dec Mar
15. Visakhapatnam Jun, Oct, Dec Mar, Jul, Oct Jan, Jul, Dec
16. Kakinada May, Oct, Dec Mar, Jul, Oct Jan, Jul, Dec
17. Ennore (Chennai) Jan, Jun, Mar, Jun, Mar, Jun, Sep, Dec Mar
Sep, Dec Sep, Dec
18. Pondicherry Jan, May, Mar, Jun, Mar, Jun, Sep, Dec Mar
Sep, Dec Sep, Dec

19. Tuticorin Mar, May, Feb, May, Mar, May, Sep, Dec Feb
Aug, Nov Aug, Dec

20. Port Blair Mar, May, Feb, May, Jun, Nov Feb
Sep, Dec Aug, Nov

Seawater quality data collected over period has indicated areas of low, moderate and intense pollution. The data further indicates that the concentration of the nutrients and population of pathogenic bacteria are confined to 0 – 1 km at these locations except in Mumbai. The details of findings at each of the locations during the last three years are available at Annexure-1.

(c) These details of the findings are being provided to the State Pollution Control Boards, who make use of the information to take remedial measures. Besides, the data are also hosted on the website of Indian National Centre for Ocean Information Services (INCOIS), Hyderabad for wider utility.

(d) Yes, Madam.

(e). Based on the data collected, the status of coastal waters has been assessed. The progress of project is being evaluated periodically by an Expert Committee and once in a year by the Steering Committee. Considering the performance of this project and its utility to various sectors in the coastal states, the committee made recommendations for continuation of the project.

Annexure-1:

The Details salient findings of this monitoring exercise carried at each of location during the last three years?

At Vadinar, water quality is observed to be good with normal values of DO and nutrients.

At Veraval, water quality of Veraval Harbour continued to be considerably degraded with low pH, low DO (which often attains zero concentration), high nutrients and BOD. However, the offshore environment sustains good water quality.

At Hazira, though the Tapi Estuary shows build up of nutrients and low DO in premonsoon, normal conditions were observed during monsoon, the offshore waters of Hazira are of normal water quality.

Thane (Mumbai): Though levels of nutrients were observed to be high at Thane creek with low DO, coastal water quality off Mumbai showed normal DO and moderate levels of nutrients.

Worli outfall (Mumbai): All the water quality parameters were in normal range and comparable with coastal area except minor depletion in DO suggesting no significant impact of release. The water quality beyond 1 km of the outfall was good with high DO and normal nutrients.

Ratnagiri and Malvan: The coastal waters off Ratnagiri and Malvan are observed to be good with normal values of DO and nutrients.

Mandovi: Coastal water quality of Mandovi is good with normal levels of DO and nutrients. Moderate levels of pathogenic bacteria were observed occasionally.

Mangalore and Kochi: Though nutrient levels were in normal range, occasional low DO and high incidence pathogenic bacteria were observed.

Kavaratti: Nutrients were in normal range. However, moderate levels of pathogenic bacteria were observed.

Tuticorin, Pondicherry, Ennore (Chennai): Levels of DO, BOD and nutrients were within normal range. However, significantly high levels of pathogenic bacteria were observed.

Kakinada, Visakhapatnam: Levels of DO, nutrients were within normal range off Visakhapatnam and Kakinada indicating fairly good water quality.

Paradip: Levels of DO, nutrients were within normal range. However, moderate levels of pathogenic bacteria were observed.

Port Blair: Coastal water quality at Port Blair is observed to be good with normal levels of DO and nutrients. However, high levels of pathogenic bacteria were observed at Junglighat bay.