GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
STARRED QUESTION No. ***73**
TO BE ANSWERED ON THURSDAY, AUGUST 8, 2013

COASTAL OCEAN MONITORING AND PREDICTION SYSTEM

***73. SHRI S. ALAGIRI:**
SHRI MANSUKH BHAI D. VASAVA:

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 FOR 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, Dec	Apr, Oct	Feb
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, Oct, Dec	Feb, Mar, Apr, Dec	Mar, May, Sep, Nov	Feb, May
10.	Kochi	Mar, Sep, Oct, Dec	Feb, Mar, May, Nov	Mar, May, Sep, Nov	Mar
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, Sep, Dec	Mar, Jun, Sep, Dec	Mar, Jun, Sep, Dec	Mar
18.	Pondicherry	Jan, May, Sep, Dec	Mar, Jun, Sep, Dec	Mar, Jun, Sep, Dec	Mar
19.	Tuticorin	Mar, May, Aug, Nov	Feb, May, Aug, Dec	Mar, May, Sep, Dec	Feb
20.	Port Blair	Mar, May, Sep, Dec	Feb, May, Aug, Nov	Jun, Nov	Feb

Seawater quality data collected over pariod 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.
- Hooghly, Sand heads: High levels of DO and moderate levels of nutrients indicate good water quality. 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.