WEATHER FORECASTING SYSTEM

166.   **SHRI HIBI EDEN:**

Will the Minister of EARTH SCIENCES be pleased to state:

(a)   whether the weather forecasting system is effectively functioning in the country;

(b)   if so, the details thereof, State/UT-wise;

(c)   whether the Government has put in place any mechanism/process for conveying sudden natural calamities like tsunami to fisherman and people in coastal areas, if so, the details thereof;

(d)   whether the weather forecasting system is a transparent system accessible to public;

(e)   if so, the details thereof?

ANSWER

**MINISTER FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(DR. HARSH VARDHAN)**

(a)   Yes Sir, weather forecasting system is effectively functioning in the country.

(b)   India Meteorological Department (IMD) operates dedicated weather and climate monitoring, detection and warning services useful for various sectors of economy. The weather forecasting systems in the country are comparable to most of the developed countries in the world. Efforts are continuously made to improve the level of efficiency of the forecasting systems and to improve skill of weather forecasts. During the past few years, IMD has been continuously improving weather prediction services in terms of accuracy, lead time and associated impact. The forecasts and warnings are issued by IMD at the national, State and district levels. IMD has a network of State Meteorological Centres for better coordination with State and district level agencies. With the upgradation of observations and prediction system noticeable improvements are noticed in the recent past in skill of prediction, especially with respect to cyclones, heat waves and heavy rainfall.

(c)   Yes Sir, the Indian Tsunami Early Warning Centre (ITEWC) was established after the deadly Tsunami on 26 December, 2004 at the Indian National Centre for Ocean Information Sciences (INCOIS), an autonomous body under Ministry of Earth Sciences, Hyderabad. The centre has the latest scientific techniques to provide early warnings of an impending tsunami in the Indian Ocean region and has functioned flawlessly since its establishment in October 2007.

The Indian Tsunami Early Warning System comprises a real-time seismic monitoring network to detect the tsunamigenic earthquakes, a real-time sea-level network consisting of tsunami buoys and tide gauges to monitor the tsunami waves, and the numerical model to estimate the tsunami travel times and expected wave heights of the tsunami at the coast. The system is operational round the clock on all days. The tsunami warning centre is capable of detecting tsunamigenic earthquakes occurring in the Indian Ocean as well as in the Global Oceans within 10 minutes of their occurrence and disseminate the advisories to the stakeholders through email, fax, SMS, GTS and website. As per the standard operating procedure of ITEWC, the advisories are being disseminated to National, State and district disaster management authorities which will be further disseminated by these authorities to fishermen and coastal communities.

After assessing the capabilities of the Centre, in October 2012, UNESCO assigned the responsibility of providing tsunami services to all countries (24 countries) on the Indian Ocean rim. Since then, the Centre is also acting as Regional Tsunami Service Provider for the Indian Ocean region.

INCOIS is also providing the early warnings on the storm surge and high wave alerts. In addition, INCOIS is also mandated to provide Ocean State Forecast services and Potential Fishing Zone advisories for the benefit of the fishermen community and coastal population on daily basis. These daily services are being disseminated through various modes of communications to approximately 6.7 lakh fishermen along the Indian coastline.

(d) & (e) Yes Sir. Weather forecast and current data are available to public through web site as well as through other modes like print/media and SMS.

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