

From
the People of Japan

BACKGROUND

Japanese Assistance for Improving Weather Forecast in Bangladesh

June 24, 2015

Since 1988, Japan has continuously contributed to improving the weather forecast service in Bangladesh through: establishment of meteorological radars; development of capacity for transmission and processing of data for weather forecasting; and building related human capacities.

1. Establishment of Meteorological Radars

(1) In 1988, Japanese cooperation to the Bangladesh Meteorological Department (BMD) started with replacement of radars in Cox's Bazar and Khepupara to improve forecasting of cyclones and storm surges.

(2) In 1999, an additional radar was established in Rangpur for better forecasting with a special focus of detecting thunderstorms in the north-west part of the country. In 2000, the radar in Dhaka was upgraded.

(3) In 2007 and 2008, the radars in Cox's Bazar and Khepupara were further upgraded to adopt "Doppler Technology" for more rigorous data collection including cyclone surveillance. In 2009, a Doppler radar was also installed in Moulvibazar.

(4) This time radar systems in Dhaka and Rangpur will be also equipped with "Doppler Technology". The existing radar in Dhaka will be transferred to Joydbpur.



Meteorological Radar at Moulvibazar

2. Data Transmission and Processing

(1) In 1994, the Storm Warning Center was established in the Bangladesh Meteorological Department. A network of micro-wave links was established between the Storm Warning Centre and the meteorological radars for the purpose of real-time visualization of radar images.

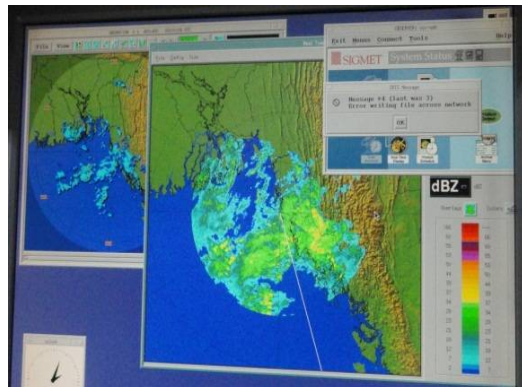


(2) In 2000, the microwave links were upgraded. The Prime Minister's Office, the Shah Jalal International airport and the Flood Forecasting and Warning Centre connected to the micro-wave network so that hazardous weather information were transmitted speedily to these important entities.

Capacity Building for Improvement of Weather Analysis

3. Human Capacities

Japan has been extending assistance for developing Bangladesh's human capacities in the area of weather forecast. From 2009 to 2013, for



Weather Data from Meteorological Radars

examples, Japan provided a technical cooperation project "Development of Human Capacity on Operation of Weather Analysis and Forecasting". The project was to enable the BMD to improve its capacity, inter alia, of quantitative rainfall estimation, a longer quantitative forecasting and tornado warning.