(c) the details of specific measures being taken by NHPC on the design for structure of Lower Subanshiri Hydro Power Project at Gerukamukh in Lakhimpur district of Assam by involving the Bureau of Indian Standards (BIS), the Building Materials and Technology Promotion Council (BMTPC), The National Disaster Management Authority (NDMA) and similar other organizations?

THL MINISTER OF EARTH SCIENCES (SHRI S. JAIPAL REDDY): (a) and (b) No clearance has so far been sought from Ministry of Earth Sciences for river valley and hydro projects. However, the Central Water Commission (CWC) of the Ministry of Water Resources gives clearance in respect of civil components for any hydropower project as a regulatory agency. The CWC is also responsible for, providing guidance in the planning, preparation of lay-out studies, specifications, detailed designs and drawings and standardization of designs of river valley projects in the country including hydrological studies for the projects, advising state Governments/Dam owning agencies on safety aspects of dams, taking policy decisions on design and research activities, conducting site inspection at all critical stages of construction of projects for which CWC provides design consultancy for advising the adequacy of foundation conditions and foundation treatment, adherence to design specifications etc. and providing advices on landslide/dam break disaster management issues.

(c) The present design of the concrete dam and other associated structures of Subanshiri Lower Hydro-electric Project fully take care of all Climatic/hydro-meteorological uncertainty, Sediment Management, Extreme seismic conditions and geological and geo-technical conditions of the project area. Provision for Disaster management has been kept in Environment Management Plan (EMP). The Disaster management Plan includes dam safety surveillance, monitoring and Emergency Action Plan which includes preventive actions *viz.* communication system, evacuation plan, etc. The detailed action plan is formulated in consultation with State Government.

Shortage of Water

*269. SHRI N.K. SINGH: Will the Minister of WATER RESOURCES be pleased to state:

(a) whether in view of the prediction of acute water shortage in the country by 2050, Government has since worked out any strategy to deal with inefficient water consumption pattern and if so, the details thereof; and (b) whether Government proposes to have detailed discussions with the State Governments and to find out a mechanism to deal with the impending water crisis and if so, the details thereof?

THE MINISTER OF WATER RESOURCES (SHRI GHULAM NABI AZAD): (a) and (b) The average arunual water availability for the country has been assessed as 1869 billion cubic meters (BCM). Due to topographic, hydrological and other constraints, the utilizable water has been estimated to be about 1121 BCM, comprising of 690 BCM surface water and 431 BCM of replenishable ground water. The National Commission for Integrated Water Resources Development (NCIWRD), in its report in 1999, assessed that the annual water requirement by the year 2025 and 2050 will be about 843 BCM and 1180 BCM respectively.

Several steps for augmentation, conservation and efficient management to ensure sustainability of water resources are undertaken by the respective State Governments. In order to supplement the efforts of the State Governments, Government of India provides technical and financial assistance to State Governments through various schemes and programmes.

Government of India has launched the National Water Mission with the objective of 'conservation of water, minimizing wastage and ensuring its more equitable distribution both across and within States through integrated water resources development and management'. One of the Goals of National Water Mission is 'increasing water use efficiency by 20%. Further, Government of India has formulated the National Water Policy, 2012 wherein several recommendations have been made for conservation, development and management of water resources in the country. Copies of the National Water Policy, 2012 have been forwarded to all State Government/UTs and concerned Ministries/Departments of Central Government for appropriate action.

(b) Consultations with representatives of State Governments are periodically held at various Conferences/Meetings including meetings of National Water Resources Council and National Water Board, etc. to discuss the problems associated with the water sector and measures needed to resolve them. The Central Government has also constituted a National Forum of Water Resources/Irrigation Ministers of States for sharing of ideas, facilitating support to new and innovative ideas and evolving consensus for better water governance in the country.