CHARAN SETHI): (a) and (c) The aseismic design of dams is governed by Bureau of Indian Standards Code 1893—1984. Some of the old dams which were not designed as per the current code may not satisfy the codal requirements for seismic safety.

(b) Due to recent earthquake in Gujarat, may earthen embankment dams in kachchh and Saurashtra region have got the longitudinal and transverse cracks and settlements of the top and the upstream face. Many dams have also developed transverse cracks at the junction of spillway and earth dam. Regulating structures like head regulators for irrigation have also been damaged in many dams. However, no damage has been reported by the Gujarat Government in concrete dams in these regions.

Ground Water Level in Delhi

3471. SHRI PARMESHWAR KUMAR AGARWALLA: Will the Minister of WATER RESOURCES be pleased state:

(a) whether it is a fact that ground water level in Delhi and other cities have been falling deep;

(b).if so, the details thereof; and

(c) what steps are proposed to be taken to stop indiscriminate use of gfound water and to replenish it?

THE MINISTER OF WATER RESOURCES (SHRI ARJUN CHARAN SETHI): (a) and (b) Long term observations made by the Central Ground Water Board have shown that ground water levels have declined by 4 to 10 metres in Mehrauli Block, 4 to 8 metres in City Block, 4 to 7 metres in Najafgarh Block and 4 to 5 metres in Kanjhawala and Alipur Blocks of NCT of Delhi during the last ten years. The names of the States/Districts having pocket where fall in the ground water level tor more than 4 metres (1981—2000) has been observed are indicated in the attached statement *(See* below).

(c) Water being a State subject, action to augment water supplies

and replenishing of ground water is to be taken by the concerned State Government. The steps taken by Union Government to check the declining trend in ground water includes:—

(i) Constitution of a Central Ground Water Authority (CGWA) under the Environment (Protection) Act, 1986 for regulation and control of ground water management and development. The Authority has been holding periodical meetings to, *inter-alia*, advise the State Governments to take suitable measures to check over-exploitation in view of decline in the level of ground water. It has initiated to process of registration of ground water extraction structures in the country.

(ii) Implementation of a Central Sector Scheme on "Studies on Artificial Recharge of Ground Water" of various States including NCT of Delhi. In Delhi, the Board has so far completed artificial recharge studies in the Indian Institute of Technology and Jawaharlal Nehru University campuses, as well as the premises of Shram Shakti Bhawan.

(iii) Circulation of Manual on artificial recharge of ground water to the States/Union Territories including NCT of Delhi to enable them to formulate area specific recharge schemes to check the declining trend in ground water level.

(iv) Circulation of a Model Bill to all the States/Union Territories including NCT of Delhi to enable them to enact suitable legislation for regulation and control of ground water development.

Statement

Name of the State/District having pockets with fall in ground water level of more than 4 Metre (1981-2000)

State	FALL IN WATER LEVEL
Andhra Pradesh	Adilabad, Anantapur, Chittor, Cuddapah, East Godavari, Guntur, Hyderabad, Karimnagar, Khamman, Krishna, Kuraool, Mahaboobnagar, Medak, Nalgonda, Nellore, Nizamabad, Prakasam, Rangareddy, Srikakulam, Vijayanagaram, Visakhapatnam, Warangal, West Godavari.
Bihar (including Jharkhand)	Dhanbad, Purb Singhbhumi
Chhattisgarh	Bastar, Bilaspur, Durg, Raigarh, Raipur, Rajnandgaon, Satna, Sidhi.
Gujarat	Ahmedabad, Amreli, Banaskanta, Bharuch, Bhavnagar, Jamnagar, Junagarh, Kheda, Kutch, Mehsana, Rajkot, Surat, Surendranagar.
Haryana	Ambala, Bhiwani, Faridabad, Gurgaon, Hissar. Jind, Kaithal Karnal, Kurushetra, Mahendragarh, Panipat, Rewari, Rohtak, Sonepat, Yamunanagar.
Karnataka	Bangalore (Rural), Bellary, Belgaum, Bcdar. Bagalkot, Bijapur, Chitradurga, Devangiri, Dharwar, Gadag, Gulbarga, Haveri, Hassan, Kolar, Mysore, Chamarajanagar, Raichur, Shimoga, Kopal, Tumkur, Uttar Kanada.
Madhya Pradesh	Bhiwani, Betul, Bhind, Chhatarpur, Chi nd war a, Damoh, Datia, Devas, Dhar, Guna, Gwalior, Indore, Jabalpur, Katnt, Khandawa, Khargone, Mandsaur, Morena, Narsinghpur, Neemuch, Panna, Raisan, Raigarh, Ratlam, Sagar, Sehore, Shajapur, Shivpuri, Ujjain, Vidisha.

State	FALL IN WATER LEVEL
Maharashtra	Ahmadnagar, Akola, Beed, Bombay, Dhule, Gadchiroli, Kolhapur, Nanded, Nasik, Osmanabad, Amravati, Aurangabad, Bhaddara, Buldhana, Chandrapur, Jalgaon, Jaina, Latur, Nagpur, Parbhani, Pune, Ratnagiri, Sangali, Sindhudurg, Thanesatara, Solapur, Wardha, Yavatmal, Buldhana, Algaon, Satara
Orissa	Angul, Balasore, Bargarh, Bolangir, Dhenkanal, Gajapati, Ganjam, Jaipur, Kalahandi, Keonjhar, Khurda, Koraput, Malkangiri, Mayurbhanj, Nawapada, Nowrangpur, Sundargarh, Suvarnapur.
Punjab	Amritsar, Bhatinda, Fatehgarh, Ferozpur, Jalandhar, Kapurtala, Ludhiana, Moga, Nawashahar, Patiala, Ropar, Sangrur.
Rajasthan	Ajmer, Alwar, Bhilwara, Durgapur, Ganganagar, Jaipur, Jaisalmer, Jhalwar, Jhunjhunu, Jodhpur, Nagaur, Pali, Rajasmand, Sikar, Udaipur
Tamil Nadu	Coimbatore, Cuddalore, Dharmapuri, Kancheepuram, Kanyakumari, Madras, Pondicherry, Pudukkottal, Sivaganga, Tanjavur, Theni, Timneivell, Tirunvallur, Tiruvannamali, Tiruvarur, Tutocorin.
Uttar Pradesh (Including Uttaranchal)	Agra, Aligarh, Allahabad, Badaun, Bijnor, Bulandshahr, Etah, Etawah, Farrukhabad, Fatehpur, Ghaziabad, Hardoi, Kanpur, Lucknow, Mathura, Meerut, Moradabad, Rai Bareli, Sharanpur, Unnao.
West Bengal	Bankura, Barddhaman, Medinapur, N-24 Parganas, Purulia.

Rain Water Harvesting

3472. SHRI PARMESHWAR KUMAR AGARWALLA: Will the Minister of WATER RESOURCES be pleased to state:

(a) whether it is a fact that rain harvesting method is the best method of replenishing ground water; and