

(b) if so, whether such serious floods may frequent into the Indo-Gangetic plains and consequently drought induced food and water scarcity may become more acute; and

(c) the steps Government proposes to initiate to combat such a situation effectively?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI VINCENT PALA): (a) The Kyoto Protocol of 1997 and Bali Plan of Action had expressed concerns about climate change and global warming that could result in major impacts such as sea level rise, changes in weather patterns and health effects. As a result of probable sea level rise, some of low lying coastal areas may face the prospect of submergence.

(b) Preliminary studies on impacts of climate change on water resources has indicated that heavy rain events would increase which may put stress on food and drinking water availability.

(c) In order to mitigate the impacts of climate change, Government of India has launched National Action Plan on Climate Change envisaging setting up of 8 National Missions, *inter-alia*, including National Water Mission with an 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. The five identified goals of the Mission are: (a) comprehensive water data base in public domain and assessment of impact of climate change on water resources; (b) promotion of citizen and state action for water conservation, augmentation and preservation; (c) focused attention to vulnerable areas including over-exploited areas; (d) increasing water use efficiency by 20%, and (e) promotion of basin level integrated water resources management.

Formulation of National Water Policy

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

(a) whether Government has since taken steps to provide protection, regulation and management of water resources in the country;

(b) if so, the details thereof along with the funds allocated and utilised for the purpose during the last three years;

(c) whether Government has formulated a National Water Policy; and

(d) if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRI VINCENT PALA): (a) and (b) Yes, Sir. Water being a State subject, all activities related to protection, regulation and management of water resources are undertaken by the respective States. However, with a view to encouraging and assisting the State Governments in this effort, Government of India has undertaken the following protection and regulatory measures:

(i) A "Water Quality Assessment Authority (WQAA)" has been established under Environmental Protection Act.

(ii) Government of India has constituted National Ganga River Basin Authority for addressing the problems of pollution of river Ganga.

(iii) A draft Model Bill to regulate and control the development and management of ground water has been circulated to the States and Union Territories. 11 States/Union Territories namely, Andhra Pradesh, Bihar, Chandigarh, Dadra and Nagar Haveli, Goa, Himachal Pradesh, Kerala, Lakshadweep, Puducherry, Tamil Nadu, and West Bengal have enacted the legislation in this regard.

(iv) The Central Ground Water Authority has been constituted under Environmental Protection Act, 2005. CGWA has directed the Chief Secretaries of the concerned States to take all measures to adopt artificial recharge to ground water/promote rain water harvesting in all the over-exploited areas falling under their jurisdiction and ensure inclusion of roof top rain water harvesting in the building bye-laws.

(v) A model Bill for Participatory Irrigation Management has also been drafted and circulated to all States. 15 States namely, Andhra Pradesh, Assam, Bihar, Chhattisgarh, Goa, Gujarat, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Sikkim, Tamil Nadu, and Uttar Pradesh have either enacted exclusive legislation or amended their Irrigation Acts for involvement of farmers in irrigation management.

(vi) Government of India is implementing the National Lake Conservation Plan for conservation and management of polluted and degraded lakes in urban and semi-urban areas

located in various States. National River Conservation Programme is also being implemented Government of India for conservation and management of polluted rivers.

Further, Government of India provides technical and financial assistance to State Governments for sustainable development and management of water resources through various programmes/schemes such as Accelerated Irrigation Benefits Programme, Command Area Development and Water Management, Repair, Renovation and Restoration of Water Bodies. Government of India also promotes artificial recharge to ground water. As per the information available, the approved outlay and actual expenditure for the last three years in the state sector (Under Major and Medium Irrigation, Minor Irrigation, Command Area Development and Water Management and Flood Control and Drainage) are as under:

(in Rs. crore)

Year	Approved Outlay	Actual Expenditure/Revised Approved Outlay
2008-09	47194.79	40577.02
2009-10	43073.60	45463.73
2010-11	51794.28	Not Available

(c) and (d) The National Water Policy, 2002 has been adopted by the National Water Resources Council in April 2002. The salient features of National Water Policy are given in Statement.

Statement

Salient features of National Water Policy, 2002

The National Water Policy - 2002 was adopted by the National Water Resources Council under the Chairmanship of the Prime Minister of India in its 5th meeting held on 1st April, 2002. The Salient features of National Water Policy — 2002 are as follows:

- Water is a prime natural resource, a basic human need and a precious national asset. Planning, development and management of water resources need to be governed by national perspectives.

- A well developed information system for water related data at national/state level should be established with a net-work of data banks and data bases integrating and strengthening the existing central and state level agencies.
- Water resources available to the country should be brought within the category of utilizable resources to the maximum possible extent.
- Non-conventional methods for utilization of water such as through inter-basin transfers, artificial recharge of ground water and desalination of brackish or sea water as well as traditional water conservation practices like rainwater harvesting, including roof-top rainwater harvesting, need to be practiced to further increase the utilizable water resources. Promotion of frontier research and development, in a focused manner, for these techniques is necessary.
- Water resources development and management will have to be planned for a hydrological unit. Appropriate river basin organizations should be established for the planned development and management of the river basins.
- Water should be made available to water short areas by transfer from other areas including transfer from one river basin to another, after taking into account the requirements of the areas/basins.
- Planning of water resources development projects should, as far as possible, be for multi-purpose with an integrated and multi-disciplinary approach having regard to human and ecological aspects including those of disadvantaged sections of the society.
- In the allocation of water, first priority should be given for drinking water, followed by irrigation, hydro-power, ecology, agro-industries and non-agricultural industries, navigation and other uses, in that order.
- The exploitation of groundwater should be regulated with reference to recharge possibilities and consideration of social equity. The detrimental environmental consequences of over-exploitation of ground water need to be effectively prevented.
- Adequate emphasis needs to be given to the physical and financial sustainability of existing water resources facilities. There is need to ensure that the water charges for various uses should be fixed such as to cover at least the operation and maintenance charges initially and a part of the capital costs subsequently.

- Management of the water resources for diverse uses should incorporate a participatory approach by involving users and other stakeholders alongwith various governmental agencies, in an effective and decisive manner.
- Private sector participation should be encouraged in planning, development and management of water resources projects for diverse uses, wherever feasible.
- Both surface water and ground water should be regularly monitored for quality. Effluents should be treated to acceptable levels and standards before discharging them into natural streams. Minimum flow should be ensured in the perennial streams for maintaining ecology.
- Efficiency of utilization should be improved in all the diverse uses of water and conservation consciousness promoted through education, regulation, incentives and disincentives.
- Land erosion by sea or river should be minimized by suitable cost-effective measures. Indiscriminate occupation of, and economic activity in coastal areas and flood plain zones should be regulated.
- Needs of drought-prone areas should be given priority in the planning of project for development of water resources. These areas should be made less vulnerable through various measures.
- The water sharing/distribution amongst the states should be guided by a national perspective with due regard to water resources availability and needs within the river basin.
- Training and research efforts should be intensified as an integral part of water resources development.

Receding Ground Water Level

152. PROF. ANIL KUMAR SAHANI: Will the Minister of WATER RESOURCES be pleased to state:

(a) whether the level of ground water in about 1820 blocks out of 5723 blocks have receded below dangerous mark due to unlimited extraction of ground water for agriculture etc.;

(b) if so, the details of measures taken to check receding of ground water level and unlimited extraction of ground water;