Q1. How can rainwater harvesting become a people’s movement like Swatch Bharat Mission?

Reply: Full potential of water conservation cannot be fully realised without the active participation of people—making it a key ingredient for water conservation. There are various components such as IEC activities, public awareness workshops and capacity building programs under Swatch Bharat Mission (SBM) which could be adopted for water conservation campaign through public participation at national level.

Capacity building at the local level, enabling residents to capitalise on rainfall gains and engage in low cost and simple solutions for reuse and recycling of waste could make a big difference in the way of rainwater harvesting and water resource management becoming a people’s movement.

National Water Mission has initiated a campaign “Catch the Rain” in order to nudge the States and stakeholders to create appropriate Rain Water Harvesting Structures (RWHS) suitable to the climatic conditions and sub-soil strata before the onset of monsoon with active participation of people to facilitate this process and to provide technical guidance to build appropriate RWHS in the States.

Hon’ble Vice President, in a recent message, urged the citizens of the country to participate in “Catch the Rain” campaign to conserve water. Additional Secretary & Mission Director, National Water Mission has written to Chief Secretaries of all States/UTs on 27th February, 2020 requesting to prepare a plan of action; initiate steps to set up Rain Centres in all districts and to take up development of RWHS in all areas. Vice Chairman, NITI Aayog in his D.O letter dated 23rd June, 2020 to Chief Secretaries has asked all states to support the campaign. NWM has written to Central Ministries/Departments, AAI, Railway Board, Army, Air Force, Navy, Universities, IITs, IIMs, Central Armed Forces, Ordinance Factory Board, Sports
Authority of India, etc. to create rain water harvesting and artificial recharge structures and support NWM in its catch the rain campaign.

Forums of Resident Welfare Associations have been requested to set up “Rain Centres” in every district headquarters. These Rain Centres will have technically qualified persons with adequate knowledge of various RWHS and their design aspects. They will be provided with a separate cell phone with a dedicated and publicised number.

Q2. Fund allocations is an important aspect and how can funds be allocated to gram panchayats for rainwater harvesting and groundwater replenishment initiatives? Are fiscal incentives available in this direction? How can cost be met more easily for rainwater harvesting structures?

Reply: Since water is a state subject, fund allocation for relevant projects is primarily routed through the States/UTs. However, there are many schemes sponsored by the Central Government under which funds are made available by both Departments of the Ministry of Jal Shakti. D/o Drinking Water and Sanitation, MoJS has a Centrally Sponsored Scheme aimed at the provision of adequate and safe drinking water, through the National Rural Drinking Water Programme (NRDWP) or the Swajal Scheme- a branch of NRDWP. D/o of Water Resources, RD & GR also implements Schemes viz. Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), Integrated Watershed Management Programme (IWMP) and Command Area Development & Water Management (CAD&WM), focusing on water conservation in rural areas.

Department of Rural Development, GoI implements Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) under which funds are provided for works relating to rain water harvesting. Government of India has allocated an additional fund of Rs 40,000 crore under MGNREGS to provide employment to migrant labourers for Natural Resources Management activities. There are 85 permissible works for water sector out of total 182 permissible works of NRM under MGNREGS.

Moreover, the Central Ground Water Board (CGWB), under the D/o Water Resources, RD & GR, has focused projects for Artificial Recharge of Groundwater along with Water Management programmes under Command Area Development
Authority (CADA). The cost for construction of Rain Water Harvesting Structures (RWHS) would be easily met by requesting funds for RWH structures through relevant central sponsored schemes.

Q3. How can we possibly harvest rainwater from roads? Will it be cost effective?

Reply: Simple solutions like proper drainage mechanisms that allow water to percolate into the soil will prove cost effective in the short run; while measures like using alternative material for road building could be long term solutions that will reap benefits in such a timeframe.

Moreover, Storm water drains can be constructed with infiltration pits to harvest rainwater and that can be pushed to groundwater through recharge wells. Drains which allow infiltration can be constructed instead of the concrete box type storm water drains which are in vogue. These are cost effective methods depends upon the type of material used for storm water drains and infiltration pits.

Q4. In urban areas, besides compulsory rainwater harvesting, should priority be given to wastewater recycling?

Reply: Waste water recycling & reuse would be an important step towards water conservation and to promote this, Municipal Corporations, Private Housing Societies, & Industries can come forward.

However, about 80% water used by the urban community comes out of houses in the form of waste water which unless properly collected, conveyed, treated and safely disposed off may eventually pollute our precious water resources and cause environmental degradation and disease causing pathogens. The volume of waste water generation, combined with the decreased volumes of fresh water available for drinking water supply, irrigated agriculture, and industries caused the states to consider the adoption of source substitution and waste water reuse, recycle policy. Therefore, safe disposal of waste water is an important aspect.
Q5. How to ensure that there are no hidden bore wells, as government is planning to ban individual bore-wells?

Reply: Central Ground Water Authority issues No Objection Certificate for drilling of bore-wells and accordingly imposes fine if bore-well is found working without NOC.

Q6. Are any programs being implemented focusing on water quality?

Reply: Various Central Government Bodies viz. Central Water Commission (CWC), Central Ground Water Board (CGWB), Central Pollution Control Board (CPCB) and Department of Drinking Water and Sanitation (DWS) handle the issues pertaining to water quality. The relevant information is available on their respective websites.

Q7. Pervious concrete can enhance the water conservation efforts through groundwater recharge. Can this option be used to construct RWH structures (recharge wells) specially?

Reply: This option can be explored to construct RWH structures. In fact, many countries such as China, USA, The Netherlands working on Sponge City concept which is based on usage of pervious floors and pavements to absorb flooded water focusing on water conservation through groundwater recharge and excess water storage in underground tanks.

Q8. Is awareness created among Gram Panchayats about water conservation? Under which scheme, grams panchayats are allocated funds for such initiatives?

Reply: All State Governments are working in the direction for awareness of Gram Panchayats for water conservation. Water, being a State subject, initiatives on water management including conservation and augmentation of ground water in the country is primarily a States' responsibility. Important measures taken by the Central Government for sustainable management of ground water including conservation in the country are as follows:
Hon’ble Prime Minister has written a letter to all Sarpanchs regarding the importance of water conservation and harvesting and exhorted them to adopt all appropriate measures to make water conservation a mass movement.

In compliance to the decision taken by the Committee of Secretaries, an ‘Inter-Ministerial Committee’ under the Chairmanship of Secretary (WR, RD & GR) has been constituted to take forward the subject of ‘Push on Water Conservation Related Activities for Optimum Utilization of Monsoon Rainfall’. The Committee has held several meetings and recommendations given by the Committee have been implemented.

National Water Mission’s campaign “Catch the Rain” is to nudge the states and stake-holders to create appropriate Rain Water Harvesting Structures (RWHS) suitable to the climatic conditions and sub-soil strata i.e. before and during the onset of monsoon. Under this campaign, drives to make check dams, water harvesting pits, rooftop RWHS etc.; removal of encroachments and de-silting of tanks to increase their storage capacity; removal of obstructions in the channels which bring water to them from the catchment areas etc.; repairs to step-wells and using defunct bore-wells and unused wells to put water back to aquifers etc. are to be taken up with active participation of the people.

Q9. Do State governments frame state specific water policy and guidelines to protect the water bodies?

Reply: It is important for state governments to form region specific guidelines for adherence to best practices, based on local water availability and tools available for its prudent conservation that may be best suited.

Currently, only Meghalaya Government has formulated its own State Water Policy. Uttar Pradesh Government is also working on framing ground water policy of the state. Punjab Government has also drafted State Specific Water Policy. Also, some States is in the planning phase to develop and adopt State Specific Water Policy.

Keeping State Specific Water Policy and guidelines to protect the water bodies in mind, NWM under its 5th Goal, launched the State Specific Action Plans (SSAP) for the Water Sector. Its implementation is based on signing MoUs with all 36
States/UTs through the National Institute of Hydrology (NIH), Roorkee and the North Eastern Regional Institute of Water and Land Management (NERIWALM), Tezpur as Nodal Agencies to facilitate the formulation of these SSAPs, with coordination, capacity building and financial grants through NWM. This programme is currently under implementation.

In addition, The Repair, Renovation and Restoration (RRR) of Water Bodies Scheme under PMKSY is on-going that aims at restoring irrigation potential by improvement and restoration of water bodies along with other multiple objectives such as enhancing the tank storage capacity, ground water recharge, increased availability of drinking water, improvement of catchment of tank commands etc. Under the Repair, Renovation and Restoration (RRR) of Water Bodies scheme, since 12th plan onwards, 2219 water bodies in cluster schemes are ongoing with an estimated cost of ₹ 1910 crore. Central Assistance (CA) of ₹ 433.89 crore has been released to states up to March, 2020.

Q10. What is more beneficial for water conservation – large dams or small dams?

Reply: Small Dams are more beneficial for water conservation.

Q11. Hydro-geo-morphological Maps should be made available free of cost for identifying the potential recharge zones for more effective implementation.

Reply: India Water Resources Information System (I-WRIS) website & BHUVAN website under the aegis of Government of India is providing various geo-morphological maps for public use.