

**GOVERNMENT OF INDIA
PLANNING
LOK SABHA**

UNSTARRED QUESTION NO:2090
ANSWERED ON:08.03.2000
WATER AVAILABILITY IN DELHI
BASANGOUDA PATIL;GADDE RAMAMOCHAN;SHIVAJI MANE

Will the Minister of PLANNING be pleased to state:

- (a) whether the Advisor Irrigation and Command Area Development of Planning Commission has suggested several measures for improving water availability in Delhi;
- (b) if so, the details thereof; and
- (c) the reaction of the Delhi Government thereto?

Answer

MINISTER OF STATE IN THE MINISTRY OF PLANNING, MINISTER OF STATE IN MINISTRY OF STATISTICS AND PROGRAMME IMPLEMENTATION AND MINISTER OF STATE OF THE DEPARTMENT OF ADMINISTRATIVE REFORMS / PUBLIC GRIEVANCES IN THE MINISTRY OF PERSONNEL, PUBLIC GRIEVANCES AND PENSIONS (SHRI ARUN SHOURIE)

(a) Yes, Sir.

(b) In the Internal Meeting of the Planning Commission held on 23.9.95 under the chairmanship of Deputy Chairman, Planning Commission, the note bringing out various aspects along with future strategies in regard to water supply for domestic purposes for the National Capital Territory (NCT) of Delhi was discussed. After discussions in the above meeting, the Note was sent in December, 1995 to the Government of NCT of Delhi with the request to take further action as deemed necessary by them. The action points suggested as a part of the demand management of the water supply problems are given in Annexure I.

© The Action Taken Report sent by Delhi Jal Board is at Annexure II.

ANNEXURE-I

GOVERNMENT OF INDIA MINISTRY OF PLANNING LOK SABHA UNSTARRED QUESTION NO. 2090 BE ANSWERED ON 08.03.2000

WATER AVAILABILITY IN DELHI

In the note sent to the Government of National Capital Territory of Delhi in Dec. 1995, the following action points were suggested :

(i) A vigorous and extensive mass information campaign through airing Radio and Television spots should be taken up to enhance public awareness about city's water plight and to let people know how they can conserve water. More important objective of such campaign should be to convince people at their sub-conscious level to conserve the water through judicious use and avoid its wasteful use.

(ii) Distribution network of water supply in Delhi needs to be rehabilitated /modernized to reduce the losses to a level of maximum 15% as well as to even the present sharp variations in water availability in different zones/areas. The investment for such modernization is obviously a higher priority than the one envisaged for new projects/schemes.

(iii) For quite some time, the auto-closing cast-iron taps are available for use at public places which allow supply of water only upon pressing. The installation of such taps as public taps in Delhi can save a lot of water which otherwise is being wasted. Deterrent action for tampering such taps could be initially warning to the residents of the locality followed by dis-connection till they mend their ways.

(iv) It is not uncommon to see in Delhi that treated water supply is being used for gardening purposes and that too, in lavish style. These days of modern technology, the `xeriscape landscaping` is too known. Xeriscape designs draw on a wide variety of attractive, indigenous and drought tolerant plants, shrubs and ground cover to replace the thirsty green lawns found in most cities. Xeriscape yard typically needs 30-80% less water than a conventional one and also can reduce fertilizer and herbicide as well.

(v) Restructuring of water pricing is needed in as much as only about one-tenth of 1% of the annual expenditure of an average family is spent on water. In fact, the water pricing structure should have adequate built-in financial deterrent measures so that consumers remain within the allotted quotas (which needs to be decided) and thereby to avoid over-use of water, particularly, treated water.

(vi) Commercial establishments, particularly, big hotels, automobile service stations etc., could be compelled to meet their most of the water demands for various uses other than drinking and cooking from the treated/recycled water or they can have their own source of water. (Israel treats about 70% of its total sewage and re-uses it to irrigate 19000 ha. of agricultural land. As in 1988, Israel was re-using water to the extent of 5% - 110 million cu. M. - of its total available water supply which was 2020 million cu. M. and now they have planned to increase the re-use to the extent of 325 million cu. M. against total water demand of 2090 million cu.m. by the year 2000).

(vii) A strong surveillance is needed against unauthorized installation of booster pumps by users themselves as well as use of treated water for non-drinking purposes like gardening etc.

(viii) Existing building bye-laws need to be suitably amended to encourage the construction of underground cisterns for collection of rain water during monsoon for domestic uses later on as a part of residential buildings. The construction of such under-ground water cisterns as a part of building was traditionally known (as `tanka`) to the people in Gujarat, Maharashtra and Rajasthan for long time. This concept needs to be revived and made popular in present context.

(ix) For the flushing system in the private/public buildings, the use of 12 litre capacity flushing system for toilets may be reduced to about 6 litres capacity model. For example in Mexico city more than 3,50,000 toilets in public places, commercial buildings and private residences were upgraded which saved 28 million cu.m. of water per year enough to meet the household needs of more than 2,50,000 residents.

(x) Continuous and sharp decline in the ground water table in Delhi area is a matter of concern. To avert this phenomenon, more and more green coverage, by way of afforestation, revival of regional depressions such as Najafgarh Jheel and the old Ganga bed on the Hindon river, north of Gaziabad as well as old mines and quarries for storage of rain/river water, should be created. Simultaneously, renovation and construction of check dams, contour bunds etc., for rain water harvesting should be taken up. Also there should be regulation of ground water extraction by a legislation. The Ministry of Water Resources had circulated the draft act called the Ground Water (Control and Regulation) Act in 1970 and later on Model Bill to regulate and control the development of Ground water in September 1992 to all States and Union Territories. Thus, the basic work for providing a legal framework to regulate the ground water development is already available now.

(xi) A scheme on the basis of a Master Plan should be taken up to create detention basins on low lying areas for storage of excess flood waters from Yamuna river as well as rain waters for using the same subsequently. Such detention basins will also help for ground water recharge.

Annexure 2

The Action Taken Report sent by the Delhi Jal Board is as follows:

1. Delhi Jal Board has initiated vigorous and extensive mass information campaign through Radio and Television to enhance public awareness about City's water situation and how to conserve water.
2. The Delhi Jal Board has replaced old/rusted/corroded water mains in walled city area in a length of 92 KMs. upto January 2000. The Delhi Jal Board has also approved a scheme for replacement of 20.75 KMs. old water lines at an estimated cost of Rs. 362 lakhs. The work on 20 ground reservoirs and booster pumping stations recommended by Tata Consultants has been completed while work on 4 is in progress. DDA has allotted land for 8 ground reservoirs and booster pumping stations in the trans Yamuna Area. Tenders to construct ground reservoir and booster pumping station at one of these sites have been invited, while proposals have been framed for the remaining.
3. Auto Closing, cast Iron Taps were tried in the past but in the absence of deterrent action for tampering with such taps, installation of these taps was stopped.
4. Instructions have been issued to all Government Departments not to use filtered water for gardening.
5. Delhi Jal Board has recently revised the water tariff of different categories viz. commercial & industrial and domestic use, effective from June and July, 1998.
6. Delhi Jal Board is releasing only limited quantity of water for big hotels and commercial establishments, restricted to their drinking water requirements only.
7. Press Release has been issued, time and again, against the use of on-line boosters to caution the public. Between April 1998 to February, 2000 the Delhi Jal Board served 15109 notices to remove on-line boosters and 4797 boosters were removed from the consumers connections.
8. Building by-laws need to be suitably amended to encourage the construction of underground tanks for collection of rain water during monsoon for domestic uses later on as a part of residential building. DDA and MCD should initiate for such amendments.
9. As regards use of 12 litres capacity cisterns for toilets, we had already requested Secretary, Ministry of Urban Development for suitable amendments in Building By-laws for use of only small cisterns of 5 to 6 litres in flush. We have also requested her that pending amendments in building by-laws, Director General, CPWD can be advised to use only small size cisterns in flush toilets in public buildings being constructed by them. We have, similarly, requested Principal Secretary (UD), Government of Delhi for similar action for amendment in Building By-laws as well as Engineer-in-Chief, PWD, Delhi Government to use only small sized flush cisterns in public buildings. The Delhi Jal Board had a dialogue with some of the leading manufacturers on sanitary fittings to start manufacturing cisterns of small sizes and cisterns with regulatory mechanism to regulate the release of water as per requirement. While cisterns of small sizes are available, the manufacturers see a limited role for cisterns only. Their contention is that the cistern releasing small quantum of water would not be able to serve the purpose efficiently and that to achieve the desired result, a combination of small size cistern and toilet seats built to their specifications should be utilized.
10. To check sharp decline in ground water table in Delhi, Central Ground Water Authority has started registration of private borewells in Delhi. Government of Delhi has decided to take up revival of regional depressions in Delhi for rain water harvesting and recharging ground water.
11. Government of Delhi has already decided to create detention basins on low lying areas for storage of excess flood water from Yamuna river as well as rain waters for using subsequently. To give additional storage it was felt that the pondage level should be raised by 1 mtr. with a new barrage across the river Yamuna in Delhi. The matter is under consideration of CWC and their report is yet to be received. Therefore, no final decision has so far been taken.