

Address by Shri S. K. Tripathi, Secretary, Department of Drinking Water Supply,
Ministry of Rural Development, Government of India

at National Seminar on
Ground Water Management Strategies
in Arid & Semi-arid regions
(23-24 June, 2000) at Jaipur, Rajasthan

Hon'ble Union Minister of Water Resources, Hon'ble Chief Minister of Rajasthan,
Minister of State, Rural Development, Government of India, Shri Subhash Maharia,
Ministers of Rajasthan State, Chief Secretary, Government of Rajasthan, officials,
delegates, media people, distinguished participants, ladies and gentlemen!

1. It gives me immense pleasure to be present in the National Seminar on ground water management strategies in arid and semi-arid regions, being held at Pink City, Jaipur. First of all let me greet the distinguished participants and also convey my good wishes and also of the Department of Drinking Water Supply, Government of India to all of you.

2. It is a common knowledge that water as an economic resource, holds the key of socio-economic development of any country. This holds good for our country including Rajasthan State, with a predominantly agrarian economy. During recent years, demand for fresh water, especially of ground water for irrigation, industry, drinking and other domestic purposes have increased at an exponential rate against a more or less fixed supply. As a result, recurring water scarcity situation is witnessed in various parts of the country and quite often situation becomes grim. Probably, situation is more alarming in 1,174 blocks spread over in 204 DPAP/ DDP districts of the country. The important factors responsible for the ever growing mismatch between demand vs. supply are, population explosion, continuous increase in the demand for higher level of supply and competing demand from the irrigation sector which consumes nearly 85% of the annual recharge of ground water.

3. I believe that prosperity of villages is essential for making India a prosperous country with all facilities. Availability of safe and potable drinking water is the first and basic necessity for improving the standard of living and economic status of the people living in rural areas. We did succeed in the Drinking Water Supply Programme, but still facility of safe drinking water is not available in all rural habitations of the country. According to available data, almost 83.35% rural habitations are fully covered with drinking water facilities. 14.8 % habitations are partially covered and 1.85% habitations are without safe drinking water sources. So far more than one lakh piped water supply schemes and over 30 lakhs hand-pumps have been installed in the rural areas.

4. So far about Rs. 27,000 crores have been invested on rural water supply schemes. The rural areas where facility of safe drinking water has not been provided so far are generally far-flung, desert or hilly and difficult areas. Per unit cost for providing safe drinking water in these areas is also high because water level in these areas is either very

low or the sources of piped water supply are very far from the habitations.

5. It has come to our notice that some new problems are coming up in those areas where facilities of safe drinking water have already been provided. At some places owing to lack of proper maintenance and operation, hand-pumps and piped water schemes have either become non-functional or safe and potable drinking water is not available from these sources. At a number of places the level of groundwater has gone very low. Due to depletion of groundwater level, the quantity of fluoride, arsenic, iron and brackishness has increased resulting in the problems of quality of water at some places.

6. Although, more than 80 % water supply needs in rural areas are met from groundwater but only 5 % of total groundwater is used for drinking purposes in rural areas and more than 85 % water is used for irrigation. Excess use of groundwater has adversely affected drinking water supply in recent years. So far, as the drinking water is concerned, we are having extensive discussions in our department about making the drinking water supply sources durable and sustainable. It has been observed that in the rural areas where drinking water sources are available and drinking water projects have been implemented, tubewells have also been installed in the nearby areas for irrigation which adversely affect drinking water supply. To tackle this problem, I would like to invite your suggestions so that the funds spent on drinking water supply do not go waste and the sources may become sustainable and durable.

7. As we all are aware, Rajasthan with substantial part falling under arid and semi-arid region is frequently ravaged by drought and has limited to moderate surface and ground water resources. Also, an appreciable part of the State experiences the problems of inland salinity. In fact, the State faces major problem of water resource both in terms of quantity and quality. Condition of ground water availability in the State is so grim that in 1995, Central Ground Water Board declared 45 blocks of the State under over-exploited and 11 blocks under dark category. This year, Rajasthan along with Gujarat and Andhra Pradesh is worst affected State due to drought. Against this backdrop, I compliment the State Government for taking a timely initiative to review the ground water policy and different management strategies. It is heartening to note that water management has been accorded high priority under the 15-point Economic & Social Priorities, announced by the State.

8. As we all know, water is a State subject and as such any management option including ground water legislation if found to be necessary and more suitable for sustainable development of ground water and protection of its quality, has to be initiated by the States. The Rajiv Gandhi National Drinking Water Mission, Government of India has been pursuing with States for adopting the Ground Water Model Bill, which has been circulated by the Ministry of Water Resources. However, the response from the majority of States is far from encouraging. In the absence of an effective regulatory mechanism for ensuring controlled development of ground water, it becomes necessary to examine various options for meeting the basic requirements of safe drinking water of the rural community.

9. In this backdrop, one option that comes readily to everyone's mind is the rainwater harvesting which is a simple, cost effective and easily adaptable approach for common people. Rainwater harvesting has the added advantage of mobilising community right from the beginning to implementation, operation and running the same. Our limited

experience has shown that it is dependable management tool for supplementing the domestic water requirements.

10. In our country, rainwater harvesting is being practiced from time immemorial. In this connection, Rajasthan is well known for having a variety of traditional water harvesting structures like Nadi, Khund, Tanka, Khadin etc. Unfortunately, as I understand, most of these structures, which are more relevant in the present water scarcity situation, have been neglected over a period of time. Revival of the traditional structures on a war footing is to be given overriding priority in the new water management policy of the State. As indicated earlier, in view of the limited water resources availability in the State, a time bound revival plan of the traditional water harvesting structures wherever feasible would supplement the requirements of water for various needs.

11. Apart from water harvesting, it is found that recharging programme implemented by different Ministries of Government of India are not providing optimal benefits, especially with particular reference to augmentation of ground water recharge. In order to overcome this problem and to ensure effective co-ordination, we have set up a Steering Committee with representatives from Ministry of Water Resources, Central Ground Water Board, Department of Land Resources, Ministry of Agriculture, Ministry of Environment & Forests and NRSA, Hyderabad. The main objectives of the Steering group are to:

- i.) co-ordinate the ground water recharge schemes undertaken by different Departments/ Ministries, and
- ii.) involve the CGWB, NRSA for arranging the needed technical inputs for getting optimal results.

12. The Mission since inception has been advising the States to undertake water harvesting and water conservation for ensuring sustainability of the drinking water source. Way back in 1994, Mission sanctioned water harvesting schemes from 17 states with a total outlay of Rs. 35.96 crore. In 1988, the Mission also took initiative in organising a National Seminar on Water harvesting systems and their management at Bangalore. Further, in 1998, keeping in view the grim water resource scenario in the country, an issue- based workshop exclusively on artificial recharge (which also covers water harvesting and conservation) was organised in Hyderabad. In 1997, as a part of dissemination of information on water harvesting, an IEC booklet on Guide on sustainability of drinking water sources meant for planners, implementers and users was prepared and has been made available to all concerned. Also, a book entitled Hand book on rainwater harvesting for the use of sector professionals was also brought out in 1998. The above publications have been circulated to all the states and States are constantly impressed upon to undertake water harvesting and water conservation schemes wherever feasible under the Sub-Mission on Sustainability.

13. It may also be mentioned that the Department of Drinking Water Supply has acknowledged the importance and utility of remote sensing techniques for delineating prospective areas for ground water recharge. It may be of interest to all of you that in the 1st phase, National Remote Sensing Agency, Hyderabad has been entrusted with the preparation of hydro-geo-morphological maps on 1:50,000 scale for the States of Karnataka, Kerala, Andhra Pradesh, Madhya Pradesh and Rajasthan. The specific objectives of this exercise are delineation of (a) prospective sites for source

development; and (b) prospective areas for water harvesting and water recharging.

14. To sum up, the water resources scenario in the country is rather grim and especially sustainability of the rural water supply source and its quality for causing a lot of concern. Keeping in view all the constraints for proper management and protection of ground water source vis-a-vis the action needed to be taken at different levels, initiatives taken by some voluntary organisations for popularising the rainwater harvesting with active community participation is commendable and provides a ray of hope. Prospects for giving high priority and thrust to this people oriented programme for ensuring sustainability of the source are bright.

15. In the light of the above situation, it is proposed to initiate the following measures towards activating water harvesting and water conservation.

i.) Presently 20% of annual allocation under ARWSP is earmarked for all Sub-Mission programmes including Sub-Mission on sustainability. But our records indicate that expenditure under Sub-Mission on sustainability is negligible in majority of the states. Under the Sub-Mission bulk of the allocation goes for tackling water quality problems. Since sustainability of the source is of paramount importance for smooth functioning of the rural drinking water supply, it is proposed to earmark 25% out of 20% exclusively for water harvesting/ recharging schemes so that implementation of such schemes may become mandatory.

ii.) In view of high priority accorded for water harvesting/ conservation/ recharging, it is proposed to enlist the support of all Members of Parliament in this effort. As a first step, a letter is proposed to be written by Hon'ble Union Minister for Rural Development to all M.Ps with a request to take up water harvesting schemes in their respective constituencies utilising the M.P's Local Area Development funds. Hon'ble Chief Minister may also like to impress upon the MPs to promote and indicate such works for implementation in their respective constituencies. In all those States, similar scheme is there for MLA's local area development, MLAs may be requested to take a lead for the same.

iii.) As a part of gearing up the pace of activities under water harvesting, it is proposed to popularise rainwater harvesting through pilot projects in select districts of the country. In this connection, initiatives have already been taken for feasibility studies for the preparation of pilot projects on rainwater harvesting in select States including Rajasthan. The feasibility studies include identification of prospective sites for water harvesting, type of structure, design and cost estimates. It will enable the states to implement the scheme without any formalities and also encourage them to replicate the rainwater harvesting in similar situation.

iv.) Apart from allocation under normal ARWSP, the recently introduced programme of Prime Minister's Gramodaya Yojana with a minimum outlay of Rs. 375.00 crore is also meant to benefit rural drinking water supply sector in the three key areas of sustainability, water quality and coverage of NC/ PC habitations. It is proposed to earmark a minimum of 25% out of the total allocation for water recharge schemes.

v.) The Department of Land Resources under the Ministry of Rural Development is a nodal agency for watershed development programmes and recently the overall budgetary

allocation has been increased from Rs. 324 to 900 crores. Action has been initiated for giving more focus/ emphasis for water harvesting/ recharging in all watershed development programmes.

16. I also propose that while formulating ground water management policy, the State may accord highest priority to drinking water and make provision for regulating the ground water exploitation especially in Over-exploited and Dark category blocks. There is also need to protect existing sources of drinking water as it has been observed that farmers, industry install tube wells in close vicinity of drinking water source, as a false notion exist that plenty of underground water is available. This leads to loss of drinking water source and lots of public investment is thus goes to waste. Further, there should be provision for protection of fossil water as it should be preserved for some grave, unforeseen emergency situation.

17. I am absolutely convinced that water management has to be made a real people's programme with lot more emphasis on IEC, HRD, and community participation. In fact, Panchayati Raj Institutions should take a lead in the matter and Voluntary Organisations have the opportunity and potential to contribute substantially as experiences of Ralegaon Sidhi, Jhabua, Dhar, Junagadh, Sukhomajhari,.etc. have shown, Here, banks and financial institutions can play a major role by joining and accelerating the whole process. Recently, Government of Gujarat has launched a new scheme on rainwater harvesting, where State provides 60 % funds and 40% is provided by local people to construct rainwater harvesting structures. Andhra Pradesh has also launched similar kind of schemes as Neeru & Meeru (You & water). I feel that these are various approaches, which could be adopted with locally suitable modifications and in this endeavour banks and financial institutions can chip into.

18. Once again, I thank the Government of Rajasthan in arranging a timely initiative for organising the National Seminar. I hope that this Seminar will firm up our experience in managing ground water resources. I am sure that detailed deliberations by distinguished delegates and experts assembled here would result in evolving a time bound Action Plan for effectively combating the issues of sustainability of the source and protection of its quality paving the way for providing safe drinking water to the entire rural community in the State within the next five years.

I wish the Seminar all success