Key note address by Shri Palat Mohandas Secretary Department of Drinking Water Supply Ministry of Rural Development Government of India

I feel honoured to deliver the keynote address at the IIPA and to the trainees from 8 North-Eastern States who are in-charge of the implementation of Water Supply and Sanitation programmes. All of you have come all the way from distant places to participate in this 2-week training cum study tour organized by this prestigious organisation. The relevance of this training programme is greater in the context of the changing scenario, both in terms of the depleting availability of fresh water resources for drinking purpose and, the rapid policy changes that are being ushered in the water and sanitation sector. I am confident that this training will equip you to meet the emerging challenges.

## Indian Scenario

Let me apprise you about the challenges faced by the water and sanitation sector globally as well as in India and more specifically in the North East. The Global Water Resources Scenario in general presents a widening gap between a more or less fixed supply against the ever increasing and unsustainable and competing demand for water from different sectors. According to the Global Environment Outlook for the year 2000, last decade has seen six-fold rise in the global fresh water consumption. Even then, 20 per cent of the world's population (1.2 billion people) lack access to safe drinking water. Most of them live in Asia and Africa. Global population is expected to reach 8 billion by 2020 and, most of them would be in the developing countries. This will lead to a decline in per capita availability of clean freshwater.

In India, per capita water availability was over 5,000 cubic metres per annum in 1950. Now, it stands at about 2,000 cubic metres. It is estimated that a decade later(2013), this would reach 1700 cubic metres and by 2025 per capita availability would be around 1500 cubic metres. This means that we have passed from adequate fresh water situation at the time of independence to water scarcity position now and we would reach a water stress situation just in a decade.

India has an average annual surface flow of 1869 Billion Cubic Metres (BCM), out of which, the estimated utilizable flow is only 690 BCM. Taking into account the total ground water resource of 431 BCM, the total estimated utilizable fresh water, thus stands at 1121 BCM. Our population growth rate is 1.8 per cent. The water demand, therefore, is bound to increase. It is evident that the demand for fresh water from different sectors has been growing against a more or less fixed availability, resulting in scarcity situation in different parts of our country. The water distress situation is experienced especially in 1174 blocks of 204 desert and drought prone districts.

Apart from the increasing mismatch in the supply - demand scenario, gross mismanagement of water resources, coupled with negligence of the water resource

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environment has been aggravating the situation. The result is reflected in the form of the indiscriminate over-drawl which has changed the hydro-geological status in the country with falling water levels, degradation of water quality and prevalence of water borne diseases. This has also changed the chemical environments of the aquifers and in some areas has enhanced toxic contaminants (fluoride, arsenic, salinity, iron, and nitrate) in water beyond the permissible limits. These have direct health implications leading to manifestations of various diseases. Excess fluoride and arsenic in drinking water sources has given rise to crippling and incurable diseases like dental, skeletal deformities and arsenic dermatitis. The fluoride contamination affects more than 160 districts in 17 states. Excess arsenic is prevalent in 8 districts of West Bengal and recently few areas of Bihar have shown traces of arsenic in drinking water. The indiscriminate use of fertilizers and insecticides along with unscientific disposal of domestic waste water, have further contributed to the deterioration of ground water quality. We need, therefore, to allocate water most judiciously to ensure water security, food security, livelihood security, health security and ecological security.

It is a matter of great pride that we have achieved significant progress in the water supply sector due to sustained efforts by the Governments, both at the Centre and in the States. An impressive achievement in the coverage of about 99% habitations with safe drinking water through 3.7 million hand pumps and more than 1.37 lakh piped water supply schemes has been achieved. Guinea worm infestation has been fully eradicated in the country. IMR, MMR are gradually coming down and many other health indicators have shown positive increase.

## Reforms in Rural Drinking Water Sector

Although, we have achieved significant coverage of drinking water in rural and urban areas, we are concerned about one of the pressing problems, namely, sustainability of sources and systems. In India, major initiatives for reforms in the Water Supply and Sanitation Sector have been taken to ensure sustainable improved service delivery to the un-served and under-served sections of the society. Inspired by the successes under the different rural water and sanitation projects, primarily under the external funded projects, the Government of India have introduced the reforms in the Rural Water Supply and Sanitation Programmes in 1999 with a view to institutionalising community based drinking water supply management by incorporating three basic principles, namely, (i) adoption of a demand-driven, and community participation approach based on empowerment of villagers to plan, design, implement and manage water supply schemes, (ii) shifting role of Government from direct service delivery to that of facilitator; and, (iii) partial capital cost sharing and shouldering of full responsibility of Operation & Maintenance by the users.

Sector Reforms, incorporating the said basic concepts are under implementation on pilot basis in 67 districts with a total outlay of Rs. 2060 Crore. It is heartening to note that out of Rs. 642.89 crore of the Central share released, these projects have utilised Rs. 455.15 crore. 2.86 million households have contributed Rs. 78.02 crore for their own water supply schemes. Out of 41027 schemes, 28067 schemes have been completed and, 19454 of those have been taken over by the communities, for operation and maintenance. Further, the reforms have been scaled up to cover the entire country and Swajaldhara has been launched, which can be executed by the Gram Panchayats or District Panchayats. Evolving community participation in each stage of the project cycle,

providing opportunities to women and the NGOs for their purposeful involvement in the programme are sharply focussed in Swajaldhara. There cannot be any standard blueprints, which can be prescribed for successfully operationalising the reform process. For evolving situation and specific appropriate innovative approach, there is need for creativity. Sector Reforms and Swajaldhara are based on the basic concepts that people want better service for which they are ready to pay. The role of the State Government machinery should, therefore, change from the present service provider to that of a facilitator and, promote more and more community led drinking water schemes.

The revised Guidelines for Swajaldhara have been issued in June 2003. It envisages, besides actualising the reforms principles, reorganisatgion of the PHEDs/ Nigams/ Boards; and, the States enter into a MOU with the Union Government for ushering in the sector reforms in a phased manner within a given time frame. The on-going ARWSP will be progressively reduced within the 10th plan; and correspondingly increased under the Swajaldhara.

## Campaign Approach for Rural Sanitation

Rural Sanitation is one of the important concerns in India as well as in the whole world. Although, significant achievements have been made in providing safe drinking water, only 60% people across the globe are covered with improved sanitation. This means, about 2.4 billion people in the world are yet to get improved sanitation facilities and, 80% of those people live in the rural areas. Unfortunately, the majority of them live in Asia and Africa and, particularly in India and China. In India, we have only 36% overall improved sanitation facilities. Rural Area has 22% sanitation coverage, which is very poor for our own standards. Still worse than our neighbours. We have launched Total Sanitation Campaign (TSC) in 1999 on a project approach to promote rural sanitation in the whole country. TSC is being implemented in the campaign mode involving peoples' participation and, triggering demand through IEC. We have sanctioned 288 such projects with a total outlay of Rs. 2870 crore with the lion's share coming from the Government of India.

We have resolved to provide water supply and sanitation facility to all government schools as well as Anganwadis in the country by the end of March 2005. We have undertaken convergence exercise with the Department of Elementary Education to achieve this laudable objective. We are also scaling up TSC and Swajaldhara to cover the entire country during the 10th plan period. Our objective is to achieve more than 50% sanitation coverage by the end of the 10th plan.

## Rural Water Supply and Sanitation in the North-East

NE Region occupies about 8% (262 sqkm) of the country's land area and accounts for about 4% of India's total population. This region has strategic importance to the country with 4500 kms of international border with 4 countries (Bhutan, China, Myanmar and Bangladesh). The region has, due to historical reasons, remained relatively undeveloped. Remoteness of the region, infant status of the States, inadequate infrastructure, lack of industries have adversely affected the pace of development. A substantial population (26%) in the region is tribal and, most of them have traditional, tribal and distinctive village community organisations, which influence the socio-economic culture and consequently the development of the area.

This region has 97,924 habitations out of which 78,041 have been covered with 40 lpcd of drinking water supply. Only 1,179 habitations are NC and 18,704 PC. Priority for the NE State Governments should be to provide adequate drinking water in the 19,883 NC/PC habitations. Adequate funds have been allocated viz. Rs.223.65 crore under the ARWSP, Rs.19.70 crore under the Swajaldhara and, Rs. 56.33 crore for the 3 special schemes announced by the Prime Minister, in his last year's Independence Day address.

Under the Sector Reform Pilot Projects, Government of India had approved 9 projects for N.E. States, including Sikkim at an estimated cost of Rs 103.27 crore. So far GoI has released Rs 38.36 crore against which the expenditure reported is only Rs. 23.25 crore. While two projects in Sikkim are non-starters, West Siang, Dimapur, West Tripura projects are progressing well.

The NC habitations in this region constitutes 9.5% and the PC habitations yet to be covered is 19 % of the total NC and PC habitations in the country. Although the NE States do not have serious water quality problems with serious health implications, the presence of excess iron in ground water particularly in Tripura, Assam and Meghalaya pose problems for drinking water purpose. Recent analysis of drinking water revealed excess fluoride (more than 10 ppm) in two districts of Assam namely Nagoan and Karbi Anglong. Steps should be taken by the State Government to tackle the fluorosis problem. Not only the pace of implementation of water supply projects needs to be accelerated but innovative community friendly-cost effective technologies needs to be adopted. I understand, these NC habitations are located in far off, difficult and inaccessible terrain and implementation of conventional water supply schemes is a difficult proposition. That is why it is more important to advocate and adopt rainwater harvesting systems, which can be easily sustained by the households and community themselves. Public Health Engineers should come out of the conventional "Construct and Commission" mode to the systems that the communities could understand, accept, adopt, afford and manage on their own. My suggestion is that give the voice and choice on technology selection to the people.

Under the Rural Sanitation programme, 33 TSC projects, at an estimated cost of Rs. 100.27 crore have been sanctioned for these 8 States. The implementation is not very satisfactory in Arunachal Pradesh, Assam and Manipur. Meghalaya is yet to avail themselves a TSC project. The status of provision of safe drinking water and sanitation facilities in the School and Anganwadis, in most of the NE States, is also not very satisfactory.

understand the N.E States have considerable constraints, specially from the point of view of difficult hilly terrain, inaccessible villages, posing difficulty in movement of rigs and other drilling equipments, inadequate ground water sources, steep gradients resulting in very high surface runoff etc. On the other hand, it has advantages also, since the region (N.E. States) receives highest annual rainfall in the country and large number sources in the upper reaches of the habitation provide scope for development of gravity water supply schemes, and the O&M cost of which will be very small. There is ample scope for adoption of rainwater harvesting and other traditional water harvesting methods in this region. Mizoram and Nagaland deserve special appreciation in this regard and other N.E. States could do well to emulate them and go for more locate - specific projects. The

other advantage in this Region is that traditionally the community has strong social bond i.e. communities have the capacity to organize and implement community based projects. Swajaldhara and TSC projects should be built on and achieve quick results.

So far as the Central Fund for Rural Water Supply & Sanitation programme is concerned, 10% of the total sector allocation is earmarked for the NE States. During the current financial year against the total Sector (RWS&S) allocation of Rs. 2750.00 crore, more than Rs 300.00 crore have been earmarked for the Region. We have already released Rs. 111.83 crore. We always try to help the NE States to implement the development programmes. Last year we could release sufficient amount out of the 10% earmarked allocation and, only Rs. 4.8 crore remained unutilized and transferred to the Central Pool of Non-Lapsable Funds for NE States. Our endeavour has always been to help the NE States in utilising the allocated funds and also in creating assets, for the alround development of the area; and, thus reduce the gap in the development of the area.

would like to express my happiness and land the IIPA for conducting this Training cum Study programme especially for the senior officers from NE States. It is a golden opportunity to take stock of the developments that are taking place in the Rural Water Supply & Sanitation sector and also delineate for ourselves, our respective roles and also collectively plan for our future growth. IIPA could consider organising similar programmes for the sector professionals and we will be very happy to collaborate with the Institute in all such endeavours.

In conclusion, let me flag the following issues of the RWSS sector which should be promoted in your States :

Water development and management should be based on a participatory approach, involving users, planners, sector professionals, and policy makers.

Women play a central role in the collection, management and safeguarding of water. Women should be brought to the focus in RWSS sector programme implementation.

Freshwater is finite and vulnerable resource and has an economic value in all its competing uses, which should be recognized as an economic good.

Involve PRIs, community based organisations for promotion of the demand responsive approach in the sector.

Please draw up State specific vision statement for the RWSS sector and prepare a plan of action for sincere implementation. We on our part in the Government of India, will extend all possible support to you.

State-specific approach should be adopted for all developmental programmes.

The North Eastern States should get perspective plans completed on priority to provide a platform for the development thrust in rural areas.

The Village Community Organisations in the North Eastern States must be strengthened,

mainstreamed and utilised in the RWSS programmes.

The contributions to the Non-lapsable pool from this RWSS sector should be 'nil' or negligible.

The unspent sum transferred to the Non-lapsable pool by various Ministries should be accessed by the States to improve basic services like drinking water, sanitation and hygiene.

I take this opportunity to thank each one of you for your patience and wish all the best in all your endeavours. My sincere thanks also due to all the staff of the IIPA and particularly to Dr. P.L. Sanjeev Reddy, IAS, Director, IIPA and my guru for inviting me to this session of the training programme.

Thank You and Jai Hind