## RECOMMENDATIONS OF THE PROCEEDINGS OF THE NATIONAL SEMINAR ON IMPACT OF WATER RESOURCES DEVELOPMENT ON ENVIRONMENT, CALCUTTA, JAN. 21, 1994

- 1. Regarding bank failure, certain criteria have been suggested for identifying areas vulnerable to erosion in Bhagirathi-Hooghly river for the post Farrakka regime. Studies are to be continued under varying discharge conditions to establish the applicability of such criteria to identify reaches vulnerable to erosion not only for Bhagirathi-Hooghly river but also for other rivers.
- 2. Society has to recognise that it can not have both its pristine environment and economic growth simultaneously. Developmental activities bring in certain changes in the environment which surrounds us. Construction of large dams is a pre-requisite to social and economic development, which bring in environmental changes. Conducting environmental at impact studies and formulation of environment management plan with subsequent monitoring have now become mandatory before any project is cleared. All efforts should be given to enforce them.
- 3. That irrigated agriculture can degrade environment is something which was not comprehended earlier. Unplanned water management have brought in adverse effects on sustainable development. Water management plan therefore must form an integral part for irrigated agriculture. In absence of such a plan no irrigation project should be cleared for implementation.
- 4. In coastal areas where saline water is likely to occur below fresh water, withdrawal of fresh water from above saline water for irrigation purpose should be made such that mixing of saline water with fresh water can be minimized. And for this proper guideline to restrict entry of saline water into the tube well should be laid down to preserve quality of fresh water and soil fertility.
- 5. In order to maintain water table and also quality of water, groundwater exploitation is to be controlled by suitable legislation.
- 6. In areas where underground water is polluted by arsenic, laws are to be enforced imposing restrictions for withdrawals of water for drinking purpose from zones below the depth affected by arsenic pollution. Studies should continue to ascertain the depth below which the groundwater is arsenic free.
- 7. With reference to the depletion in the piezonmetric levels in Calcutta to the extent of 9 m. even though subsidence has not been noticed, uncontrolled withdrawal should not be allowed. This should be controlled through proper legislation. The entire withdrawal system of underground water in Calcutta should be examined in order to establish a proper data base.
- 8. Salt affected areas have rendered a large area unproductive, for quick identification of which suitable methods like remote sensing should be adopted.

