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January 2001

The Water and Environmenta Sanitation Sector in India

Profiles of Government and Donor Programme

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Department for International Development



DIRECTORY

The Water and Environmental Sanitation Sector in India

Profiles of Government and Donor Programmes



Foreword

It is now twenty months since the Department for International Development (DFID) India published the first Directory for the Water and Environmental Sanitation Sector in India. The Directory has been well received by the Government of India, bilateral and multilateral support agencies and others interested in the field of development co-operation in water and environmental sanitation in India, and has proved to be a useful reference document.

Twenty months is a long time in development. Many of the entries in the first directory, particularly the lists of key contacts, have become outdated. In addition comments received have highlighted additional information which can usefully be included in future editions.

In this context, DFID India is pleased to present this updated directory of the Water and Environmental Sanitation Sector in India to all those working towards provision of sustainable services to poor people, as a key step in the elimination of poverty.

The concept of the Directory remains unchanged; a reference work which brings together information on contacts, policies and projects for the organisations listed. Significant changes in this second edition are the inclusion of information about additional Central Government Ministries, and the addition of an indicative list of non government organisations working in the Water and Environmental Sanitation Sector in India.

It is increasingly recognised that drinking water can not be considered in isolation, that all demands must be managed if sustainability of the source is to be achieved. The Ministries of Water Resources, Irrigation and Agriculture, and the Central Ground Water Board all have substantial roles to play in the overall development and management of water resources in India.

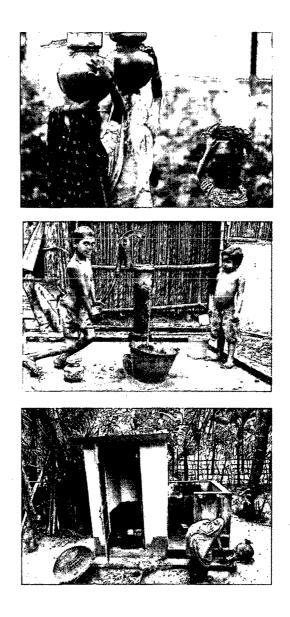
The Government of India has acknowledged in many of its programmes the role that can be played by non-government and community organisations in provision of sustainable services for poor people. Many such organisations now work in partnership with people and government to address poverty.

Despite these additions, the list of organisations included in the Directory is far from exhaustive. DFID India welcomes comments and further input both from those organisations who have contributed to this edition, and others active in the sector.

It is hoped that this new edition of the Directory will continue to encourage closer collaboration between all actors in the sector, and will assist in dialogue on a consistent approach to improved provision of water and environmental sanitation services to the poor in India.

DFID India would like to acknowledge the support and co-operation of all those who have contributed to this new edition.

Robert Graham-Harrison Head, DFID India New Delhi January 2001



Contents

Water and Sanitation – The Indian Context

Government of India Organisations

Ministry of Agriculture	13
Ministry of Rural Development	19
Ministry of Urban Affairs and Employment	25
Ministry of Water Resources	33
Rajiv Gandhi National Drinking Water Mission	45
Central Ground Water Board	53
CAPART	59

6

.

Donor Agencies

Asian Development Bank	65
AusAID	73
Canadian International Development Agency (CIDA)	77
DANIDA	83
Danida's Watershed Development Co-ordination Unit	87
DFID (India)	91
EUROPEAN UNION	101
Embassy of France	105
Food & Agriculture Organisation of the United Nations	111
The Ford Foundation	113
GTZ India	119
Japan Bank for International Co-operation	123
ĸfW	129
Netherlands Development Co-operation	135
Norwegian Agency for Development Cooperation	139
Swedish International Development Co-operation Agency	145
United Nations Development Program	147
UNESCO	151
United Nations Inter Agency Working Group - WS	157
UNICEF	161
USAID - Regional Urban Development Office	171
Water and Sanitaion Program - South Asia (WSP - SA)	175
World Bank Infrastructure Unit	179
World Bank Rural Development Unit	181
World Health Organization	185
WaterAid - India	191
An Indicative List of NGOs in Water and Environmental Sector	197
Some Water and Environmental Sanitation Sites	206
Further Reading	208
Index	210

Water and Sanitation – The Indian Context

Some facts

Water is one of nature's most abundant and useful compounds. Of the many essential elements for human existence, water is of greatest importance. Over two-thirds of the human body is constituted of water. No form of life, be it plant, animal or human, can exist without water. Civilisations have evolved and developed around water bodies as most human activities, including agriculture and industry, depend on water. At the same time water is also a source of conflict and problems.

Over 70 per cent of the Earth is covered with water. Nearly 97 per cent of the world's water is salty or otherwise undrinkable. Another two per cent is locked in ice caps and glaciers. That leaves just one per cent for all of humanity's needs - all its agricultural, residential, manufacturing, community and personal needs.

In 1990, more than 335 million of the world's 5.3 billion people lived in water-stressed or water-scarce countries. About one-fifth of the world's population lacks access to safe drinking water, and with present consumption patterns two out of every three persons on the earth will live in water-stressed conditions by 2025. Pollution, scarcity of water resources and climate change will be the major emerging issues in the next century¹. Water pollution adds enormously to existing problems of water scarcity by removing large volumes of water from the available supply. The pollution threat is particularly serious when it affects ground water supplies, where contamination is slow to dilute and purification measures are costly.

Indian Water Resources

Most of the rainfall in India takes place under the influence of South West monsoon between June to September. Rainfall in India shows great variations, unequal seasonal distribution, still more unequal geographical distribution, and frequent departures from the normal. India is a land of many rivers. Its geographical area is criss-crossed by a large number of small and big rivers, some of them figuring amongst the mighty rivers of the world.

1122 cu km

National Water Resources at a Glance

Total

Description	Quantity
Annual Precipitation Volume (Including snowfall)	4000 cu km
Average Annual Potential Flow in Rivers	1869 cu km
Estimated Utilisable Water Resources	
Surface Water Resources	690 cu km
Ground Water Resources	432 cu km

¹ Global Environment Outlook 2000, the United Nations Environment Program's millennium report.

Achievements and Future Directions

In the five decades since independence, India has witnessed phenomenal development of water resources and has, in the main, successfully met the demand of water for many of the diverse uses in the country. Consequently, the country has achieved self-sufficiency in foodgrains. Investments made during the last fifty years in water related infrastructure in the country have resulted in rapid expansion in the urban, energy and industrial sectors. Infrastructure for safe drinking water has been provided to about 85 per cent of India's urban and rural population². However, there remain significant challenges in providing sustainable services, especially for the poorest and hard to reach.

India's irrigated agriculture sector has been fundamental to its economic development and poverty alleviation. The rapid expansion of irrigation and drainage infrastructure has been one of India's major achievements. From 1951 to 1997, gross irrigated areas expanded four-fold, from 23 million ha to 90 million ha³. However, this achievement has been at the cost of groundwater depletion, water-logging and in increasing salinity levels affecting large areas.

With the rapid population growth since independence, water is becoming an increasingly scarce resource in the country. Despite this, water continues to be used inefficiently on a daily basis in all sectors. At independence, the population was less than 400 million and per capita water availability over 5,000 cubic meters per year (m³/capita/yr). Today, fifty years later, the population has grown to 1 billion and water availability has fallen to hardly more than 2000 m³/capita/yr. The situation is already critical at river basin and local levels: six of India's twenty major river basins have a water availability of less than 1000 m³/capita/yr, and environmental problems and localised shortages are endemic in all basins⁴.

India's finite and fragile water resources are stressed and depleting, while sectoral demands (including drinking water, industry, agriculture, and others) are growing rapidly in line with urbanisation, population increases, rising incomes and industrial growth. This has resulted in declining per capita availability and deteriorating quality. Inter-sectoral allocations, planning, and management of increasingly fragile water resources has thus emerged as a major challenge before the nation.

The 1987 National Water Policy states that – "In the allocation of water, ordinarily first priority should be for drinking water, with irrigation, hydro-power, industrial and other uses following in that order". India has achieved considerable success in providing infrastructure for safe drinking water to about 85 per cent of her rural population by tapping ground and surface water through handpumps, water supply schemes, and traditional sources. The Government of India is committed to providing safe drinking water facilities to all *not covered (NC)* and *partially covered (PC)* habitations in the rural areas within the next two years⁵.

Since the beginning of the Sixth Five-Year Plan (1980-85) and the launch of the International Drinking Water Supply and Sanitation Decade, India has substantially increased its commitment to the water supply and sanitation sector. Sector investments have increased and presently constitute about three per cent of the national budget. Of the total budget allocated to the sector, approximately 60 per cent has been earmarked for rural areas. Significant achievements in coverage have been realised, with over 85 per cent of the rural population now provided with public water supply facilities. However, national guidelines and investments in the rural water supply and sanitation sector, which have traditionally focused on extending coverage to rural areas, neglected to ensure that the quality of services to rural areas remained adequate.

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² Inter-sectoral Water Allocation, Planning & Management; India Water Resources Management; World Bank & Ministry of Water Resources, Government of India; 1999. ³ pp xvii, The Irrigation Sector; India Water Resources Management; World Bank & Ministry of Water Resources, Government of India; 1999.

⁴ pp xvii; Inter-sectoral Water Allocation, Planning & Management; India Water Resources Management; World Bank & Ministry of Rural Areas and Employment; 1999.
⁵ pp xi; Rural Water Supply and Sanitation; India Water Resources Management; World Bank & Ministry of Rural Areas and Employment, Government of India; 1999.

Achievements in sanitation coverage have been less extensive. Recent data show that population coverage in rural areas by sanitary latrines has increased from 11 per cent to about 16 per cent during the Eighth Plan. This is inclusive of the efforts of all government and private initiatives.

At the end of the Seventh Plan, Government of India statistics show that about 84 per cent of India's urban population had access to water supplies and 48 per cent to sanitation services. The Urban Water Supply and Sanitation Sector has under-performed against expectations to date⁶. The programme review of the Eighth Plan has brought out the concentration of efforts on State capitals and other major cities and on augmentation and improvement, without any significant additional population coverage, resulting in the efforts being absorbed by population growth.

The government is committed to the following principles, as stated in the Eighth Five-Year Plan (1992-97):

water should be managed as a commodity;

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- the provision of rural water supply and sanitation services should be based on expressed demand;
- emphasis should be placed on decentralisation;
- emphasis should be placed on user participation and private sector involvement;
- operation and maintenance should be managed at the local level with emphasis on financial sustainability; and
- sanitation programmes should be integrated with those of water supply⁷.

For current and future activities, the government has set out its policies and priorities in the Ninth Plan. This Plan carries forward the policies of the Eighth Plan and incorporates several new points that have emerged from the experience of the Eighth Plan. Some salient points from the Ninth Plan are:

- improve water use efficiency by progressive reduction in conveyance and application losses (for irrigation).
- take concrete steps towards comprehensive and integrated development of natural water resources, taking into account the
 possibility of inter-river-basin transfer of surplus water.
- encourage and implement the conjunctive uses of ground and surface waters towards optimal utilisation of water resources and to have its development environmentally sustainable.
- in urban areas, address the priority concerns of universal coverage, adequacy in terms of minimum per capita consumption
 norms, quality, distance from source as well as regularity of supply, bringing in its wake the policy and operational issues of
 drying and inaccessible sources of water, recycling of waste water and sewage for non-domestic use, water harvesting,
 among others.
- for rural areas, seek to attain universal coverage of drinking water through different programmes and strategies in *no source* villages/ habitations, *partially covered* villages/habitations, and *whXer quality problem* villages/ habitations. A habitation-driven approach to be adopted in preference to a purely village-centred approach.
- make efforts to have greater participation of the private sector in financing urban and rural drinking water supply projects and programmes.
- ensure participation of the communities at all stages of the project implementation and in the management and maintenance of drinking water systems.
- provide water supply on the principle of effective demand, which should broadly correspond to the standard of service that the users are willing to maintain, operate, and finance.
- make efforts to ensure that ground water is managed as a common property resource rather than allowing it to be overexploited as an open access resource.

⁶ Urban Water Supply and Sanitation; India Water Resources Management; World Bank and Ministry of Urban Affairs and Employment, Government of India; 1999. ⁷ pp xili; Rural Water Supply and Sanitation; India Water Resources Management; World Bank & Ministry of Rural Areas and Employment, Government of India; 1999.

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- ensure cost recovery in drinking water supply schemes starting with O&M cost and total capital cost later; though subsidy in
 pricing to continue, more sparingly than in the past.
- integrate sanitation programmes with water supply.
- for rural areas, adopt a demand-driven low-cost sanitation approach in preference to a supply-driven approach.
- improve the technology content for the rural sanitation programme and include compost toilet and latrines-based bio-mass activities.
- encourage the use of low-cost on-site sanitation in unsewered parts of cities, small and medium towns, and other locations
 where this strategy might be feasible.

Roles of Donors - International & National

Donor development organisations (multilateral & bilateral) approach the issue of water from several inter related and overlapping viewpoints. Some of these are:

- watershed development
- rural development / rural infrastructure
- poverty reduction
- environmental protection and sustainability
- urban development / infrastructure
- management of water resources
- child's environment
- drinking water supply and environmental sanitation
- environmental health

Within these approaches, agencies focus on particular components and cover a large area or adopt a more integrated approach and focus on a small area. However, the trend in all donor organisations is to have a more integrated approach. The movement is from project based support to programme based support. Within programme support, the movement is from sub areas (drinking water, irrigation, watershed development, etc) to integrated management of water resources.

All donor programmes are aligned to the Government of India programmes and schemes in water resources. The individual programmes and projects complement government programmes. Almost all donors work under the overarching approach of Poverty Reduction. There are variations within this. For example, the issue of urban water supply and sanitation is addressed by the Asian Development Bank, USAID and the World Bank (Infrastructure Unit) through urban development, whereas the Japan Bank for International Co-operation, the European Commission and AusAID (Australia) approach it through environmental improvement and sustainability. UNICEF approaches it through the Child's Environment, and the WHO (World Health Organisation) through Environmental Health. UNESCO involves itself in developing capabilities for management and research of water related issues. Several donors have programmes in watershed development. Almost all programmes place an overwhelming emphasis on people's participation and the involvement of Panchayati Raj Institutions and other people's organisations. Donors like the Ford Foundation, WaterAid, and CAPART (Council for Advancement of People's Action and Rural Technology) provide significant funding and technical support to non-government efforts.

Donor programmes provide pilots for new and innovative approaches and set up field models. They tend to work on qualitative aspects, where government programme funds are often not available; enhancing community participation; etc. Several donor programmes work in under-served and problem prone locations.



Profiles of Government and Donor Programmes

Government of India Organisations

The Water and Environmental Sanitation Sector In India

5

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Watershed Development Programme

- Status of Rainfed Areas 1. Of the total cultivated area of 142 million ha. In the country, the rainfed area accounts for 89 million ha. (63%). Rainfed areas contribute 45 per cent of total foodgrain production. Rainfed agriculture is characterised by low level of productivility, low input use and instability in production.
- Adoption of Watershed Approach In the post Green-Revolution period the thrust of Indian Agriculture is on enhance-2. ment of agricultural productivity through sustainable practices. To achieve this end one of the major initiatives undertaken by the Government of India was the implementation of a national level project/programme for the development of rainfed areas through the watershed approach. The Govt. of India has accorded the highest priority to the holistic and sustainable development of rainfed areas through integrated watershed approach. The current strategies are based on the mobilisation of people's participation, the concept of conservation of rain water for integrated development of watershed, promotion of diversified and integrated farming system approach, management of common property resources and augmenting family income and nutritional level of participatory watershed community through alternate household production systems. Suitable institutional arrangements at various level constitute an integral component of these projects for promoting people's participation and ensuring sustainability.
 - National Projects 3. In consonance with the overall developmental objectives and the strategy for holistic and integrated development of rainfed areas, Ministry of Agriculture have been actively involved in Planning, formulation, monitoring and reviewing of various water-

National Watershed Development Project for Rainfed Areas (NWDPRA)

shed based developmental project activities, which includes among other things one National Watershed Development Project for Rainfed Areas (NWDPRA) and sizeable number of internationally/bilaterally aided projects.

With a view to address various developmental objectives aiming at integrated and 4 holistic development of rainfed areas, as outlined above, a Centrally Sponsored Scheme, namely National Watershed Development Project for Rainfed Areas (NWDPRA) was launched in 1990-91 and implemented during the VIII Five Year Plan at an estimated cost of Rs. 1100.00 crores in 25 States and 2 UTs. During Eighth Five Year Plan, against a target of 2.8 million ha., an area of 4.3 million ha. was developed through implementation of project spread over in 2554 water sheds with an expenditure of 971.52 crores. During Ninth Five Year Plan, it is targeted to treat 2.25 million ha. of rainfed areas at a cost of Rs. 1020.00 crores. During the first three years of the Ninth Plan an area of 16.65 lakh ha. has been treated using Rs. 559.40 crores. The approach and strategy of the project is based on twin concepts of integrated watershed management and sustainable farming systems development. This is achieved through treating both arable/ non-arable lands and natural drainage lines in the rainfed areas for in-situ moisture conservation associated with diversified farming systems approach and addresses the ecological and productivity concerns and aims at harmonising ecology, economy and equity.

- Watershed Development Project in Shifting Cultivation Areas (WDPSCA)
 - Common Approach for Watershed Development

Watershed Development Fund (WDF)

- Watershed Development Project in Shifting Cultivation Areas (WDPSCA) is under implementation in seven North Eastern States. During first three years of Ninth plan Rs. 4500.00 lakhs have been released under this project.
- 6. With a view to bring about uniformity in approach between different Ministries implementing watershed projects a "Common Approach" has been jointly formulated by an Inter-Ministerial Committee and adopted by the Ministries of Agriculture and Rural Development. The main features of "Common Approach for Watershed Development" are community participation, decentralization, use of location specific technologies and sustainability.
- 7. A Watershed Development Fund (WDF) has been established during 1999-2000 at NABARD with the objective of integrated water shed development in 100 priority districts through participatory approach. The total corpus of the WDF is Rs. 200 crores which includes Rs. 100 crores by NABARD and a matching contribution of Rs. 100 crores by Department of Agriculture & Cooperation, Ministry of Agriculture, Govt. of India. The fund will be utilised to create the necessary framework conditions to replicate and consolidate the isolated successful initiatives under different programmes in the government, semi-government and NGO sectors. The WDF is being operationalised in close coordination with the Central and State Ministries and Departments as a continuum of their efforts but with a distinct identity with flow of contribution by NABARD and the Government of India financially and managerially. As per the programme of operation, 14 states will be covered in 2 phases (6 States in phase-I and 8 states in

phase-II). Phase-I includes the States namely Andhra Pradesh, Maharashtra, Gujarat, Madhya Pradesh, Orissa and Uttar Pradesh. Phase-II includes Bihar, Karnataka, Rajasthan, Tamil Nadu, Jammu & Kashmir, West Bengal, Himachal Pradesh and Haryana. In all, about 100 districts are to be covered with WDF mode of assistance. Two-third of the allocation from the Fund will be loans to the State Government at an interest rate of 9.5 per cent for watershed development and remaining one-third will be for grant based activities covering promotional efforts & capacity building. Latest progress report indicates that in Phase-I, Memorandum of Understanding has been signed by Himachal Pradesh, Gujarat and Uttar Pradesh with NABARD, Mumbai for taking the loan. Memorandum of Understanding is expected to be signed by Orissa & Maharashtra. In Phase-II, except Bihar and Jammu & Kashmir, other states have expressed their willingness to avail the loan facility from WDF. Follow-up work is in progress by NABARD.

Externally Aided Projects World Bank & EEC Aided Projects

- Intergrated Watershed Development Project (Hills) Phase-II in the States of Haryana, Himachal Pradesh, Jammu & Kashmir, Punjab and Uttar Pradesh.
- Agriculture Development Projects in the state of Bihar, Rajasthan, Assam and Uttar Pradesh.
- Doon Valley Watershed Management project.

Bilateral Projects

- DANIDA- in the States of Karnataka, Orissa, Tamil Nadu and Madhya Pradesh.
- KFW aided Integrated Watershed Development Project in Karnataka and Maharashtra.
- DFID assisted Watershed Development Project in Karnataka.
- Netherlands Funded Agriculture, Man and Ecology South Phase IV Project.

Impact Evaluation Studies

The impact assessment of the Scheme of NWDPRA in the saturated watersheds of the States have been carried out by the Agro- Economic Centre, various independent agencies, and the Natural Remote Sensing Agency (NRSA). The evaluation studies have been conducted in Gujarat, Rajasthan, Andhra Pradesh. The findings of the studies indicate:

- Increase in cropping intensity and changes in cropping pattern.
- Increase in underground re-charge as a result of conservation measures.
- Reduction in soil and run off losses with lesser siltation effect.
- Increase in family income through diversified farming system such as livestock development, dryland horticulture and household production activity.

Future Programme

 Institutional Strengthening for Enhanced Geographical Coverage & Greater Community Participation.

- Capacity Building & Human Resource Development
- Convergance of on going Production Programme with Watershed Programme
- Sustainability & Resource Mobilization.

State Secretaries incharge of Rainfed Farming Systems

1.01

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18

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Restructured Central Rural Sanitation Programme

The concept of sanitation was earlier limited to disposal of human excreta by cesspools, open ditches, pit latrines, bucket system etc. Today, it connotes a comprehensive concept that includes liquid and solid waste disposal, hygiene – personal, domestic as well as environmental hygiene.

9th Plan Strategy

Despite the acceleration in implementation during the 8th Plan, the total sanitation coverage stands at mere 16-20 per cent of the total rural households in the country. Keeping in view the experiences of the Central Government, State Governments, NGOs and other implementing agencies and the recommendations of the Second National Seminar on Rural Sanitation (which was held in July'98) the strategy for the 9th Plan has been revised as under so that rural coverage under the programme can be widen: -

- Shift from a high subsidy to a low-subsidy regime.
- Greater household involvement
- Choice of technology according to customer preferences
- Stress on software; IEC, development of back up services trained masons, building materials through Rural Sanitary Marts/Production Centres.
- Intensive IEC Campaign
- Emphasis on School Sanitation

<u>19</u>

New Initiatives

The Restructured Central Rural Sanitation Programmes (RCRSP) has come into being from 1st April 1999. It moves away from the principle of State-wise allocation primarily based on poverty criteria to a "demand driven" approach in a phased manner with a view to achieve at least 25 per cent coverage of rural population by the end of the 9th Plan Period. It is community led and people centered. Rural School Sanitation has been introduced as major component and as an entry point encouraging wider acceptance of sanitation by the rural masses. The State would be required to formulate project proposals under the total Sanitation Campaigns (TSCs) in order to claim GOI assistance. TSC in to be implemented in project mode. The "allocation based" programme will be phased out progressively during the 9th Plan period. The restructured programme offers the option for location specific technologies.

Total Sanitation Campaign A Total Sanitation Project shall be designed to suit district specific requirements and it is implemented in phases. The actual physical implementation is to be oriented towards satisfying the felt need using the "vertical upgradation" concept wherein individual beneficiaries get to choose from the flexible menu of options that allow for subsequent upgradation, depending upon their requirements and financial position. Selection of pilot district is done by the State Governments. Under TSC projects assistance is given for construction of individual household latrines, sanitary complexes for women, school sanitation, construction of drains/garbage pits, alternate delivery mechanism etc.

Revised Subsidy Structure Under the restructured Rural Sanitation Programme, subsidy on individual latrines has been restricted to Rs 500 which will be shared by the Centre and State. No subsidy is provided to the beneficiaries opting for household individual latrine costing more than Rs. 1000.

- Start up activities, IEC
- Up to five per cent of the total TSC project cost is to be earmarked for start up activities with 100% funding by the GOI.
- At least 15 per cent of total TSC project cost is to be earmarked for IEC activities with the sharing pattern of 80:20 between Centre and State.
- Up to five per cent of the total TSC project cost subject to maximum of Rs 35 lakh is earmarked for establishing Production Centre/Rural Sanitary Mart.

School Sanitation Programme School Sanitation is a vital component of environmental sanitation. It is very important from the point of view of children's rights and also the fact that school children can potentially act as the most persuasive advocates for the benefit of the sanitation practices in their own households. Therefore, a new component viz. "School Sanitation" has been introduced under RCRSP and under it up to ten per cent of the funds under TSC could be earmarked for School Sanitation. The maximum amount for construction of per toilet in school is Rs 20000 to be shared in the ratio of 60:30:10 by Centre, State and Panchayat/School respectively.

Village Sanitation Complexes for Women

20

On the recommendations of the State Governments, approval has been given for construction of village sanitation complexes for women, where individual household latrines are not feasible.

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The Water and Environmental Sanitation Sector in India

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Ministry of Urban Affairs and Employment

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Water And Sanitation The Planning Commission's Technical Group on Urban Policies has projected the urban population at 31.0 per cent of the total population in 1996-97 and 38.0 per cent in 2006-07. During the last four and half decades, some 5-6 million people have been added to urban India every year. The country has one of the largest urban systems with 217.6 million people in 1991, which is projected to increase to 289 million in 2001 and around 605-618 million during 2021-2025. There will be about 40 metro cities in the country in 2001 as against 23 in 1991.

Some estimates are available on the magnitude of work ahead. In terms of financial indicators, the investment for urban housing has been estimated at Rs.5,26,170 crore and for rural housing Rs.1,72,930 crore between 1997 and 2021 for new housing, upgradation and extension,Rs.70,300 crore to Rs.3,07,500 crore for different types of urban drinking water systems with the investment being higher for surface than for ground water system. A large part, in some cases, more than one-half, will be the backlog of investment¹. In a shorter term perspective of 1997-2002, urban housing investment has been estimated at Rs.1,21,370 crore and for urban water supply at Rs. 26,300 crore and for rural water supply at Rs. 40,000 crore ².

¹ Government of India (1996), Second United Nations Conference on Human Settlements (Habitat II), National Report, Ministry of Urban Affairs & Employment.

² Planning Commission (1996), Reports of Ninth Plan Working Groups. Performance Review

Provision of water supply and sanitation is the responsibility of state governments. The Ministry of Urban Affairs and Employment assists the State Government in their programmes by :

formulating broad policy framework;

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- providing central assistance through legislation or issue of guidelines and notifications;
- providing assistance through centrally sponsored schemes;
- providing technical guidance;
- organizing training and workshops;
- sponsoring research and development projects; and processing assistance from bilateral, multilateral and international institutions for state government projects.

Programmes

Low Cost Sanitation for Liberation of Scavengers

26

There are currently two programmes under execution: these are the Low Cost Sanitation for Liberation of Scavengers and the Accelerated Urban Water Supply Programme (AUWSP).

This scheme has been under implementation through this Ministry since 1989. It provides for conversion of existing dry latrines into low cost water seal pour flush latrines and construction of new sanitary units where none exist to prevent open defecation. The basic objective is to liberate the scavengers from the obnoxious practice of carrying headloads of night soil. The scheme is being implemented on a 'whole town' basis and is operated by the provision of a subsidy from this Ministry and by the provision of loans from HUDCO.

The Employment of Manual Scavengers and Construction of Dry Latrines prohibition Act, 1993, is in force in all the Union Territories and also in the States of Andhra Pradesh, Goa, Karnataka, Maharashtra, Tripura and West Bengal. The State assemblies of Assam, Bihar, Haryana, Orissa and Punjab have adopted the Act.

The Eighth Plan provision was Rs. 150 crore in the Central Plan, which was only about 25 per cent of the required assistance to meet the objective of conversion of all the existing dry latrines in urban areas of the country numbering 50 lakh units into low-cost pour-flush sanitary latrines and 100 per cent liberation of scavengers on "whole town" coverage basis. As on March 31, 1997, 760 schemes were sanctioned in 1,155 towns with a total project cost of Rs.1,062.36 crore, towards which a loan of Rs. 477.09 crore and subsidy of Rs. 363.31 crore was sanctioned. The loan released was only 30.16 per cent (Rs. 143.87 crore) and the subsidy released was 41.23 per cent (Rs. 155.50 crore). The projects were sanctioned to construct 14.52 lakh new units and convert 19.25 lakh dry latrine units into low-cost pour-flush latrines for the individual households and 3,463 community latrines. In terms of actual work done, 6.95 lakh units were completed upto Eighth Plan period out of 33.77 lakh units sanctioned (20.6 per cent). It is expected that at 1991-92 prices, the expenditure during the Eighth Plan was 45.3 per cent of the Plan outlay.

The impact of the programme on the physical and financial front has not been impressive. This is due to a variety of reasons, particularly insufficient schemes provided by the State Governments, delays in preparing documents and papers for sanction of loan and subsidy (separately for each beneficiary), slow release of subsidy due to inadequate physical progress, inappropriate technology, lack of awareness and reluctance of State Governments to give guarantee. An evaluation of the programme in three States, sponsored by the Central Ministry of Urban Affairs and Employment had brought out evidence to show that the objectives of the scheme were not strictly adhered to, the recommended technology was often unsuitable, relatively better-off families took over a substantial number of the pour-flush latrines and funds were inadequate or not available for the superstructure.

Accelerated Urban Water Supply Programme (AUWSP)

In the initial period of planning, from the First to the Fifth Plan, the outlay on urban drinking water was considered substantial with respect to the size of the urban population (17.3 to 19.9 per cent) but thereafter, the thrust in the Plan programme was diverted to rural water supply. Drinking water supply and sanitation facilities are very important and crucial for achieving goal of Health for All. The Government is committeed to provide drinking water to every settlement in the country within five years.

The task in the Eighth Plan was to increase the coverage of access to safe drinking water to about 94 per cent of the urban population from 84 per cent at the end of Seventh Plan. While the full feedback on coverage is not available, it has been estimated that in terms of estimated 1997 population, the coverage of urban population is unlikely to increase from the level attained in the Seventh Plan. Adequate investment would be needed to meet the requirements of incremental population for drinking water and sanitation services.

AUWSP is a centrally sponsored scheme initiated with the objective of solving the drinking water problem in towns having a population of less than 20,000 (as per the 1991 census). The AUWSP was launched in 1993-94 with a modest outlay of Rs.50 crore. There are a total of 2,151 eligible towns (1991 Census). The scheme is funded by the Central and State government in the ratio 50:50. The amount of the allocation is dependent upon an assessment of the water scarcity and the size of the revenue base of the small town under consideration. The programme was launched towards the end of 1993-94.

During the Eighth Plan period, an amount of Rs. 689.624 crore was released by this Ministry to various State governments for implementation of 227 schemes. A total estimated amount of Rs. 218.50 crore was approved during the same period.

The progress was modest, partly because the scheme was launched only in March, 1994 and there were delays in the acquisition of land, change of water sources, procurement of materials and equipments, submission of timely physical and financial reports by States and release of funds by the State Governments to the implementing agencies. These teething problems would be resolved and the activities should go on full stream in the Ninth Plan.

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Activities

Development of trained manpower is one of the thrust areas of the Ministry. The CPHEED organizes various training courses for the in-service engineers working in the State Public Health Engineering Departments/ Water Supply and Sanitation Boards through academic institutes and field departments. Grants are provided to the recognized engineering colleges and training institutes for conducting post graduate, short term and refresher courses.

The Ministry authorizes technical clearance of water supply and sanitation schemes for implementation by the state governments.

The urban local bodies and municipalities are primarily responsible for the formulation and implementation of schemes for management of urban wastes. The Ministry's role is to act as a facilitator wherever possible. A Manual on Solid Waste Management is under preparation by Expert Committee which will help the urban local bodies to manage waste effectively.

The Ministry sponsors a research and development programme and organizes seminars and workshops on important issues in the sector.

Ninth Plan Priorities and Strategies

While the provision of drinking water facilities in urban areas in the country has improved over the years, the provision of sewerage and drainage facilities has not received adequate attention. Ideally the water supply and liquid waste management schemes should be integrated. The absence of this integrated approach has resulted in the degradation of the environment, with serious health impact from water-borne and vector-borne infections. In some areas, industrial contamination with heavy metals also leads to severe health haz ards. The Ninth Plan Sub-group of the Planning Commission on Environment and Health had concluded that the unsatisfactory progress in supply of safe drinking water and sanitary disposal of solid and liquid waste has contributed to the continued high morbidity from water-borne and vector-borne diseases. The Expert Group on Public Health and the Working Group on Health Care Delivery in Urban and Rural Areas recommended that water quality monitoring and surveillance as well as the projects for urban waste management should be taken up on a priority basis to achieve substantial reduction in morbidity due to water and vector-borne diseases.

The urban drinking water supply strategies in the Ninth Plan would address the priority concerns of universal coverage, adequacy in terms of minimum per capita consumption norms, quality, distance from source as well as regularity of supply, bringing in its wake the policy and the urban drinking water supply strategies in the Ninth Plan would address the priority concerns of universal coverage, adequacy in terms of minimum per capita consumption norms, quality, distance from source as well as regularity of supply, bringing in its wake the priority concerns of universal coverage, adequacy in terms of minimum per capita consumption norms, quality, distance from source as well as regularity of supply, bringing in its wake the policy and operational issues of drying and inaccessible sources of water, recycling of waste water and sewage for non-domestic use, water harvesting, among others. The strategies to promote and strengthen decentralisation of production and distribution systems, privatisation and participation of the community in management and maintenance are expected to not only induct higher efficiency levels and effective reach out but also

contain line leakages and wastages. Over-exploitation of ground water must be avoided to maintain quality and to control water pumping cost. Appropriate legislation and its effective implementation should form an integral part of the strategy. The modified model Bill of the Central Ministry of Water Resources on ground water exploitation may be considered by State Governments for adoption.

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_____29___

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31

The Water and Environmental Sanitation Sector in India

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Functions And Organisational Set Up of the Ministry

Functions And Set Up

36

The Ministry of Water Resources is responsible for laying down policy guidelines and programmes for the development and regulation of country's water resources. The Ministry is responsible for the following functions: -

 (a) Overall planning, policy formulation, coordination and guidance in the sector of water resources.

Key Document: Ministry of Water Resources, Annual Report 1999-2000

	(b) Technical guidance, scrutiny, clearance and monitoring of the irrigation, flood Control and multi-purpose projects (major/medium) of the States.
	(c) Infrastructural, technical and research support for sectoral development at the State level.
	(d) Providing special central financial assistance for specific projects and assistance in obtaining external assistance from the World Bank and other agencies.
	(e) Overall policy formulation, planning and guidance in respect of minor irrigation and command area development, and also the administration and monitoring of the centrally sponsored schemes in these areas.
	(f) Overall planning for the development of ground water resources, establishment of utilisable resources and formulation of policies of exploitation, overseeing of and support to the State level activities in ground water development.
	(g) Formulation of the national water development perspective and determination of the water balance of different basins/sub-basins for possible inter-basin transfers.
	(h) Coordination, mediation and facilitation in regard to the resolution of differences or disputes relating to inter-state rivers and overseeing of the implementation of inter- state projects.
	 (i) Operation of the Central network for flood forecasting and warning on inter-state rivers, the provision of central assistance for some State schemes in special cases and preparation of flood control master plans for the Ganga and the Brahmaputra.
Policy And Planning Wing	All policy matters relating to the development of water resources, preparation of five year plans, annual plans, Twenty Point Programme, administrative matters relating to the Narmada Control Authority, Sardar Sarovar Construction Advisory Committee, matters relating to Sardar Sarovar Project, Central Water and Power Research Station, Central Soil and Materials Re- search Station, New Delhi and the National Institute of Hydrology, Roorkee are being handled in the Policy and Planning Wing. It looks after the external assistance for water resources projects from the international funding agencies.
Eastern Rivers Wing	This Wing deals with matters relating to Ganga and Brahmaputra basins and in particular, international aspects of development of water resources and sharing with Bangladesh, Nepal, and Bhutan. It also deals with matters relating to Ganga Flood Control Commission, Patna and the Brahmaputra Board, Guwahati. Matters concerning flood management and sea erosion of the entire country are handled in this Wing.
Water Management Wing	The Water Management Wing of the Ministry of Water Resources is responsible for the implementation of the World Bank assisted Hydrology project in eight States and five Central agencies. A project coordination Secretariat for coordinating, monitoring, administrating and managing the implementation of the project has been set-up in the WM Wing. The wing also monitors the implementation of World Bank assisted Water Resources Consolidation Projects, currently under implementation in the State of Haryana, Tamil Nadu and Orissa. Besides, the wing also deal with issues related to National Water Management Project and Pricing of Irrigation Water.

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38

National Water Policy

Recognising water as a precious national asset, the National Water Policy embodies the Nation's resolve that planning and development of water resources should be governed by the national perspective. The policy recognises drainage basin as the basic unit of planning for development of water resources and calls for appropriate measures to optimise utilisation of this resource not only for the benefit of the people living in the basin, but also for transfer of surplus water to meet the requirements of areas which have shortage of water. The policy are: -

- Water is a precious national resource and its development should be governed by the national perspectives;
- The available resources, both surface and ground water, should be made utilisable to the maximum extent;
- Planning for water resources to be on the basis of the hydrological unit such as a drainage basin or sub-basin. Appropriate organisations should be established for the planned development and management of the river basins as a whole;
- Water should be made available to areas where there is a shortage by transfer from other areas including transfers from one river basin to another, after taking into account the requirements of the basins;
- Project planning for development of water resources should, as far as possible, be for multiple benefits based on an integrated and multi-disciplinary approach having regard to human and ecological aspects and special needs of disadvantaged sections of the society;
- In the allocation of water, ordinarily first priority should be for drinking water, with irrigation, hydro-power, industrial and other uses following in that order;
- The ground water potential should be periodically reassessed and its exploitation regulated with reference to recharge possibilities and consideration of social equity;
- Due care should be taken right from the project planning stage to promote conjunctive use of surface and groundwater;
- Maintenance, modernisation and safety of structures should be ensured through proper organisational arrangements;
- There should be close integration of water use and land use policies and distribution
 of water should be with due regard to equity and social justice;
- Efficiency of utilisation should be improved in all the diverse uses of water and conservation consciousness promoted through education, regulation, incentives and disincentives;
- Water rates should be such as to foster the motivation for economy in water use and should adequately cover the annual maintenance and operational charges and a part of the fixed cost;
- Farmers should be progressively involved in the management of irrigation systems;
- There should be a Master Plan for flood control and management for each flood prone basin. In flood control and management, the strategy should be to reduce the intensity of floods by sound watershed management and provision of adequate flood cushion in water storage projects wherever feasible to facilitate better flood management of each flood prone basin;

•	Land erosion by sea or river should be minimised by suitable cost-effective measure	
	Indiscriminate occupation of, and economic activity in coastal areas and flood plain	
	zones should be regulated;	

 Needs of drought-prone areas should be given priority in the planning of projects for development of water resources. These areas should be made less vulnerable through soil-moisture conservation measures, water harvesting practices, the minimisation of evaporation losses, the development of ground water potential and transfer of surface water from surplus areas where feasible and appropriate.

Pastures, forestry or other modes of development which are relatively less water demanding should be encouraged;

- A national information system on water resources should be established with a network of data banks and data bases integrating and strengthening the existing Central and State level agencies;
- Training and research efforts should be intensified as an integral part of water resources development programmes.

Updating/Revision Of National Water Policy Since the adoption of the National Water Policy in 1987, a number of problems and challenges have emerged in the development and management of the water resources sector. Therefore, the existing National Water Policy needs to be reviewed and updated in the context of existing problems/emerging challenges and also in the light of the experiences of the last ten years of its implementation. Some of the important areas/aspects, which need to be considered for their inclusion in the existing National Water Policy, include multi-sectoral perspective and participatory approach towards resource planning and management, private sector participation and integration of quantity, quality and environmental aspects in the water resources management, mandatory operation and maintenance, funding and related policies for revenue generation and reforms related to legislations, institutions, incentives/disincentives, environment and technology etc. under the water resources sector.

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National Water Resources Council National Water Resources Council (N.W.R.C) was set up by the Government of India in March, 1983 as a national apex body with the Prime Minister as the Chairman, Union Minister of Water Resources as the Vice-Chairman, and concerned Union Ministers, Chief Ministers of State Governments and Administrators/Lt. Governors of the Union Territories as Members. Secretary, Ministry of Water Resources, Is the Secretary of the Council. The functions of the Council are as follows: -

- (a) To lay down the National Water Policy and to review it from time to time;
- (b) To consider and review development plans submitted to it (including alternative plans) by the National Water Development Agency, the River Basin Commissions etc;
- (c) To recommend acceptance of the plans with such modifications as may be considered appropriate and necessary;
- (d) To give directions for carrying out such further studies as may be necessary for full consideration of the plans or component thereof;

39

- (e) To advise on the modalities of resolving inter-state differences with regard to specific elements of these plans and such other issues that may arise during planning for implementation of the project;
- (f) To advise on practices and procedures, administrative arrangements and regulations for fair distribution and utilisation of water resources by different beneficiaries keeping in view optimum development and the maximum benefits to the people; and
- (g) To make such other recommendations as would foster expeditious, environmentally sound and economical development of water resources in various regions.

National Water Board

National Water Board was constituted in September, 1990 with Secretary, Ministry of Water Resources, as Chairman, Chief Secretaries of all the States/UTs, Secretaries of concerned Union Ministries and Chairman, CWC as Members in order to review the progress of implementation of the stipulations of the National Water Policy for reporting to the NWRC and also initiate effective measures for systematic development of the country's water resources. Member (Water Policy and Planning), CWC is the Member-Secretary of the Board.

State/UT Secretaries/ Engineers-in-Chief/ Key officials dealing with Water Resources (as in August 2000)

State: Andhra Pradesh - Hyderabad Chief Secretary: P V Rao Phone: (040) 345 2620 Fax: (040) 3453700 Principal Secretary, Irrigation: P K Agarwal Phone: (040) 345 2529, 345 0857 Fax: (040) 345 3511 Secretary, Irrigation: D Chakrapani Phone: (040) 345 4327 Engineer-in-Chief: B Rosaiah Phone: (040) 390 411 Fax: (040) 390 411

<u>State</u>: Assam - Dispur <u>Chief Secy</u>: P K Bora Phone: (0361) 561 120 Fax: (0361) 560 900 <u>Comm.& Sec (Irr/CAD/GW/MI)</u>: Pitambar Neog Phone: (0361) 547 014

<u>State</u>: Arunachal Pradesh - Itanagar <u>Chief Secy</u>: P M Nair Phone: (0360) 212 595, 212 446 Fax: (0360) 212 446 <u>Comm (Irr/CAD/GW/MI)</u>: R I Jaiprakash Phone: (0360) 212 947 Fax: (0360) 212 762 <u>State</u>: Bihar - Patna <u>Chief Secv</u>: V S Dubey Phone: (0612) 223 804, 222 085 Fax: (0612) 223 983 <u>Secv. (WR)/CAD/GW</u>: Mrs Radha Singh Phone: (0612) 223 377 Fax: (0612) 225 948 <u>MI Secv</u>: M M Singh Phone: (0612) 225 657

<u>State</u>: Goa - Panaji <u>Chief Secv</u>: Ashok Nath Phone: (0832) 223 168 Fax: (0832) 225 254 <u>Irr. Secv (Dev.Com.PWD)</u>: Ashok Kumar Phone: (0832) 224 801

State: Gujarat - Gandhinagar Chief Secretary: L N S Mukundan Phone: (02712) 203 72 Fax: (02712) 200 52 WR & Narmada Secretary: N B Desai Phone: (02712) 235 04 Fax: (02712) 230 56 Irrigation & R&R Secretary: M S Patel Phone: (02712) 200 32 CAD.MI/GW Secretary: N B Desai Phone: (02712) 235 04 Fax: (02712) 230 56

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State/UT Secretaries/ Engineers-in-Chief/ Key officials dealing with Water Resources (cont.)

<u>State</u>: Haryana - Chandigarh <u>Chief Secy</u>: R S Verma Phone: (0172) 740 118 Fax: (0172) 740 317 <u>Irri/GW/MI Secretary</u>: Smt Urvashi Gulati Phone: (0172) 740 133 Fax: (0172) 740 526 <u>CAD Administrator</u>: M G Thukral Phone: (0172) 566 408

State: Himachal Pradesh - Shimla Chief Secretary: A K Goswarni Phone: (0177) 221 022 Fax: (0177) 221 813 Mrs Sarita Prasad Phone: (0177) 220 560 Fax: (0177) 221 154 CAD/GW/MI Secretary: Ajay Prasad Phone: (0177) 221 897

State: Jammu & Kashmir - Jammu/Srinagar Chief Secretary (Jammu): Ashok Jaitly Phone: (0191) 546 773 Fax: (0191) 546 188 Chief Secretary (Srinagar) Phone: (0194) 452 257 CAD/GW/MI/Irri Secy: B R Kundal Phone: (0191) 549 264

<u>State</u>: Karnataka - Bangalore <u>Chief Secretary</u>: B K Bhattacharya Phone: (080) 225 2442 Fax: (080) 225 8913 <u>Principal Secretary (Major Irr)</u>: S K Thruva Phone: (080) 225 5524 Fax: (080) 225 5306 <u>Secy Minor Irr.</u>: Ramesh Kumar Phone: (080) 225 4965

State: Kerala - Thiruvanthapuram Chief Secretary: M Mohan Kumar Phone: (0471) 327 376 Fax: (0471) 333 301 <u>GW/MI/Irri Secretary</u>: Elias George Phone: (0471) 333 407 Fax: (0471) 333 115 <u>State</u>: Madhya Pradesh - Bhopal <u>Chief Secretary</u>: K S Sharma Phone: (0755) 551 848 Fax: (0755) 551 521 <u>WR Principal Secretary</u>: G S Sahni Phone: (0755) 551 577 Fax: (0755) 550 372 <u>Secretary WR</u>: V S Verma Phone: (0755) 552 646 Fax: (0755) 552 406

State: Maharashtra - Mumbai Chief Secretary: A L Bongirwar Phone: (022) 202 5042 Fax: (022) 202 8594 Principal Secretary: Mohan Das Phone: (022) 202 3109 Fax: (022) 202 5046 CAD Secretary: A B Mahendrakar Phone: (022) 202 3038 Water Supply Secretary: V P Raja Phone: (022) 288 5144 R&R Secy: A P Sinha Phone: (022) 202 5274

<u>State</u>: Mizoram - Aizwal <u>Chief Secretary</u>: H V Lalringa Phone: (03832) 322 411 Fax: (03832) 322 745 Vanheela Pachuau Phone: (03832) 324 542 Fax: (03832) 326 330

<u>State</u>: Manipur - Imphal <u>Chief Secretary</u>: Rakesh Phone: (0385) 221 144 Fax: (0385) 222 629 <u>Irrigation Secretary</u>: M A Sattar Phone: (0385) 221 020 <u>CAD Secy</u>: L Gangte Phone: (0385) 221 183

41_

State/UT Secretaries/ Engineers-in-Chief/ Key officials dealing with Water Resources (cont.) State: Meghalaya - Shillong Chief Secretary: J P Singh Phone: (0364) 224 801 Fax: (0364) 225 978 Irrigation/MI Secretary: H K Mazhari Phone: (0364) 223 578 Fax: (0364) 225 978

<u>State</u>: Nagaland - Kohima <u>Chief Secretary</u>: R S Pandey Phone: (03966) 270 076 Fax: (03966) 222 410 <u>Irrigation Secretary</u>: B Susiluao Phone: (03966) 270 068

State: Orissa - Bhubaneshwar Chief Secretary: S M Patnaik Phone: (0674) 402 300 Fax: (0674) 400 244 WR & CAD Secretary: B K Patnaik Phone: (0674) 401 864 Fax: (0674) 402 446 Engineer in Chief: J C Sahoo Phone: (0674) 400 180

<u>State</u>: Punjab - Chandigarh <u>Chief Secretary</u>: R S Mann Phone: (0172) 740 156 Fax: (0172) 742488 <u>Principal Secretary (Irri/GW/CAD/MI</u>: Rajesh Chhabra Phone: (0172) 742 351 Fax: (0172) 742 911

State: Rajasthan - Jaipur Chief Secretary: Inderjit Khanna Phone: (0141) 380 254 Fax: (0141) 380 114 Irrigation Secretary: S Bhargava Phone: (0141) 380 335 Fax: (0141) 380 335 CAD Secretary: B S Minhas Phone: (0141) 380 663 GW/MI Secretary: K L Meena Phone: (0141) 383 380 State: Sikkim-Gangtok Chief Secretary: Sonam Wangdi Phone: (03512) 22 315 Fax: (03512) 22 851 Irrigation Secretary: D P Pradhan Phone: (03512) 23 404 Fax: (03512) 23 404 CAD Secretary Phone: (03512) 22 418 GW/MI Secretary Phone: (03512) 225 683

<u>State</u>: Tamil Nadu - Madras <u>Chief Secretary</u>: A P Muthuswami Phone: (044) 536 1555 Fax: (044) 536 2304 <u>Irrigation Secretary & PWD</u>: N P Gupta Phone: (044) 536 1622 Fax: (044) 536 8840

<u>State</u>: Tripura-Agartala <u>Chief Secretary</u>: V Thulasi Das Phone: (0381) 224 392 Fax: (0381) 224 013 <u>CE (WR)</u>: B C Saha Phone: (0381) 225 664

State: Uttar Pradesh - Lucknow Chief Secretary (Additional charge): A P Verma Phone: (0522) 221 599 Fax: (0522) 239 283 Irri. & CAD Secretary: D P Singh Phone: (0522) 238 956 Fax: (0522) 238 289 Chief Engineer (Water Resources): Y P Singh Phone: (0121) 645 192 Engineer in chief: M B L Aggarwal Phone: (0522) 225 811 State/UT Secretaries/ Engineers-in-Chief/ Key officials dealing with Water Resources (cont.)

State: West Bengal - Caicutta Chief Secretary: Manish Gupta Phone: (033) 221 5858 Fax: (033) 235 4328 Irrigation Secretary: A K Sarkar Phone: (033) 321 6980 Fax: (033) 334 6245 Water Investigation Secretary: Renu Ghosh Phone: (033) 221 5666 Fax: (033) 235 6025

<u>UT</u>: Andaman & Nicobar Islands -Port Blair Ramesh Narayanaswami Phone: (03192) 340 87 Fax: (03192) 326 56

UI: Chandigarh Adminstrator: Lt Gen JFR Jacob Phone: (0172) 740 740 Fax: (0172) 741 058 Advisor toAdministrator: Vinita Raigar Phone: (0172) 742 001 <u>UT</u>: Dadar & Nagar Haveli - Silvassa Daman & Diu - Daman <u>Administrator (Silvassa)</u>: O P Kelkar Phone: (0260) 642 787 Fax: (0260) 642 787 O P Kelkar Phone: (0260) 254 770 Fax: (0260) 254 775

<u>UT</u>: NCT Of Delhi <u>Delhi Chief Secretary</u>: P S Bhatnagar Phone: (011) 252 7808 Fax: (011) 393 2962

<u>UT</u>: Lakshadweep - Kavaratti Chaman Lal Phone: (04896) 622 55 Fax: (04896) 621 84

<u>UT</u>: Pondicherry <u>Chief Secretary</u>: T T Joseph Phone: (0413) 334 145 Fax: (0413) 337 575

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Rajiv Gandhi National Drinking Water Mission

Paryavaran Bhawan, B-1 Block, 9th Floor, CGO Complex, Lodi Road, New Delhi- 110 003

Key Personnel

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Rural Water Supply Programme

Drinking water supply is a State subject. Funds have been provided in the budgets of the states for drinking water supply right from the commencement of the first Five-year plan. Drinking water facilities to rural habitations are provided under the State Sector Minimum Needs Programme(MNP). The Central Government endeavours to supplement the efforts of the States by providing assistance under the Centrally Sponsored Accelerated Rural Water Supply Programme (ARWSP). Powers have been delegated to the States to plan and implement the rural water supply schemes.

The National Agenda for Governance of the Government of India envisages provision of safe drinking water to all in the next five years. The Department of Drinking Water Supply has been newly created in the Ministry of Rural Development for implementing a programme for attaining this objective.

Strategy	 The strategy to achieve the objective of providing drinking water to all rural habitations in the next five years revolves around the following three distinct but interrelated issues: Accelerating the coverage of remaining not covered and partially covered habita- tions with safe drinking water system. To tackle the problem of water quality in affected habitations and to institutionalise water quality monitoring and surveillance systems. To promote sustainability, both of systems and sources, to ensure continued supply of safe drinking water in covered habitations.
Achievements	 About 98 per cent of rural habitations have access to drinking water facilities. Guineaworm eradicated. More than 3.5 million handpumps installed. More than 116,500 piped water supply schemes installed.
Present Status	 An investment of more than Rs. 30,000.00 crore has been made in the water supply sector till date. Status of coverage of rural habitations as on 1-4-2000, based on the information furnished by the State Governments, was as follows: Total H422664 Fully Covered (FC) Partially Covered (PC) 222493 Not Covered (NC) 27443 There are about 2,17,000 quality affected habitations.
Comprehensive Action Plan for Coverage of all Rural Habitations in Five Years	In consonance with the National Agenda for Governance of the Government for providing safe drinking water to all in five years, the State Governments were requested to prepare comprehensive action plans to attain this avowed objective, indicating the total requirement of funds. A Comprehensive Action Plan has been prepared based on the information received from the States and the requirement of funds to achieve the objective is to the tune of Rs. 45,000 crore (approx.). The objective can be achieved subject to availability of funds.
Policy Initiative	 The Government of India has revamped the Rural Water Supply Programme which, interalia, envisages to institutionalise community based rural water supply systems by incorporating the following three basic principles for ensuring peoples' participation: Adoption of a demand-driven responsive and adaptable approach based on empowerment of villagers to ensure their full participation in the project through a decision making role in the choice of scheme design, control of finances and management arrangements: Shifting role of Government from direct service delivery to that of facilitator. Partial cost sharing either in cash or kind or both and 100 per cent responsibility of Operation & Maintenance by end-users.

58 Districts, all over the country, have been identified for implementing the sector reform projects, incorporating the above basic concepts, on a pilot basis. 57 of them have already been sanctioned for implementation. Based on the experiences gained from the implementation of these pilot projects, this concept would be gradually expanded to all the remaining districts in the country.

Sub-Mission Programmes A

A number of quality problems like excess fluoride/iron/arsenic/brackishness besides bacteriological contamination have emerged in the rural drinking water supply and problems like excess fluoride/arsenic pose a major health hazard affecting a substantial rural population in the country. Ever since the Mission mode approach was adopted for coverage of problem villages in 1986, the Mission also accorded high priority for tackling major quality problem as indicated above by constituting exclusive Sub Mission for initiating both preventive and remedial measures on a war footing in consultation with the concerned affected States. The Mission successfully implemented cent per cent eradication of guinea worm (dracun culiasis) in association with the Union Health Ministry. Powers to plan, sanction and implement Sub-Mission projects have been delegated to the State Governments. States have also been instructed to utilise 25 per cent of the expenditure incurred on the Sub-Mission projects for implementation of projects on water recharging activities.

State/UT Secretaries/ Engineers-in-Chief dealing with Rural Water Supply

 State: Andaman & Nicobar

 Secy & CE: I HS Dogra

 PWD, Port Blair

 Phone: (03192) 32 852

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 SE: R K Singh

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State: Andhra Pradesh Principal Secretary PR & RD: S. Ray Govt of AP, Room No. 807, L-Block, 8th floor Sectt, Hyderabad - 500022. Phone: (040) 345 4670 Fax: (040) 345 6946 Email: sray@ap.gov.in Engr-in-Chief, PR: D. Bhaskara Rao Engg Deptt SRTGN Bhavan, Errummanzil Colony Hyderabad - 500 082 Phone: (040) 339 6655 Fax: (040) 331 9688 CE (Rural): Rama Naidu Phone: (040) 331 9731/3

State: Arunachal Pradesh Commr & Secy, PHED: Tabam Bam Govt of Arunachal Pradesh Itanagar - 791111 Phone: (0360) 212 339 Fax: (0360) 33 265 Chief Engr,PHED: T.Bagra PB No.108 Govt of Arunachal Pradesh Phone: (0360) 212 298 Fax: (0360) 33 265

State: Assam Secretary, PHED: PK Dhurah Govt of Assam, Bengrabari Guwahati - 781006 Phone: (0361) 561 483 Fax: (0361) 561 483 Chief Engr: Bolen Baishya Govt of Assam, Bengrabari Guwahati - 781 006 Phone: (0361) 561 505 Fax: (0361) 561 505

State/UT Secretaries/ Engineers-in-Chief dealing with Rural Water Supply (cont.)

48

State: Bihar Secretary (RWS & UD) PHED: NS Madhawan, Govt of Blhar Patna - 800 015 Phone: (0612) 231 087 Fax: (0612) 238 586 Email: phedbih@bih.nic.in Chief Engr (Rural) PHED: Aun Mohammed Govt of Bihar, Patna - 800015 Phone: (0612) 233 906 Fax: (0612) 233 059

<u>State</u>: Goa <u>Secretary (PWD)</u>: Ashok Kumar Govt of Goa, Panjim Phone: (0832) 224 801 Fax: (0832) 223 849 <u>Chief Engr, PWD</u>: T.K. Mohandas Altinho, Govt of Goa, Panjim Phone: (0832) 226 443, 225 515 Fax: (0832) 223 113

State: Gujarat Secretary (WS): RK Tripathy Narmada Water Resources & WS Deptt Govt of Gujarat Gandhi Nagar Phone: (02712) 20 470 Fax: (02712) 25 952 Member Secretary GWSSB: KB Patel Sector-16, Govt of Gujarat Gandhi Nagar - 382 016 Phone: (02712) 22 423 Fax: (02712) 22 684 AS &CE (WS): JV Mankad Phone: (02712) 22 258 Fax: (02712) 23 707 CE. GWSSB: KK Jadeja Phone: (02712) 232 91, 306 23, 233 05

 State: Haryana

 Fin Commr & Secy: KC Sharma

 Govt of Haryana

 Chandigarh - 160 019

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 Engr-in-Chief, PWD BH: PD Gupta

 Br. Sec, 19-B, Govt of Haryana

 Chandigarh - 160 019

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State: Himachal Pradesh Fin. Commr., Secy (PH) Irrigation & PHED: Sarita Prasad Govt of Himachal Pradesh, US Club Shimla - 171 001 Phone: (0177) 220 560 Fax: (0177) 220 560, 212 841 Spl Secy: Sanjeev Gupta Phone: (0177) 222 269 Fax: (0177) 225 596 Engr.In-Charge: Sashi Kant Gupta Phone: (0177) 258 556 Fax: (0177) 212 841

 State: Jammu & Kashmir

 Commr & Secy: BR Kundal

 Power Dev Deptt, Govt of J&K

 Civil Sectt, Jammu

 Phone: (0191) 547 935

 (0194) 452 237 (Srinagar)

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State/UT Secretaries/ Engineers-in-Chief dealing with Rural Water Supply (cont.)

State: Karnataka Secy, RD&PR Deptt: M R Srinivasamurthy Govt of Karnataka, Bangalore - 570 009 Phone: (080) 226 1322 Fax: (080) 226 4650 Engr-in-Chief, PHED: B.Srinivas Anand Rao Circle, Govt of Karnataka, Bangalore - 560 009 Phone: (080) 287 4810, 286 6095 Fax: (080) 287 3071 Email: root@nicphe.kar.nic.in; ejc@nicphe.kar.nic.in

State: Kerala Secy: Elias George Water Supply Deptt, Govt of Kerala Thiruvanathapuram - 695 006 Phone: (0471) 333 407 Fax: (0471) 333 407 MD: K Govindan Kutty Nair Kerala Water Authority, Jal Bhavan Water Works Campus Thiruvanthapuram - 695 033 Phone: (0471) 322 797 Fax: (0471) 324 903

State: Maharashtra Principal Secretary: S. Prabhakaran Water Supply and Sanitation Deptt. Govt of Maharashtra. Mantralaya, Mumbai - 400 032 Phone: (022) 288 5144 Fax: (022) 288 3862, 284 5502, 282 8129 Member Secy: Suresh Salvi Maharashtra Jal Pradhikaran, Mumbai Phone: (022) 284 1576 Fax: (022) 202 9348 Chief Engr (Rural): PD More **MWSS Pradhikaran** 4th Floor, Express Towers Nariman Point, Mumbai - 400 021 Phone: (022) 284 6671 fax: (022) 288 2862, 284 5499, 282 8129

State: Manipur Secretary, PHED: NG Luiknam Govt of Manipur 55, New Sectt, Imphal - 795 001 Phone: (0385) 222 512 Fax: (0385) 222 629 Chief Engr, PHED: S. Gouro Singh Govt. of Manipur, PWD Complex, Khoyathong Imphal - 795 001 Phone: (0385) 220 163 Fax: (0385) 221 561

<u>State</u>: Mizoram <u>Secretary, PHED</u>: JH Ramfamg Zauva Govt of Mizoram, Aizawl Phone: (0389) 325 314 Fax: (0389) 323 672 <u>Chief Engr. PHE (Circle-1)</u>: M. Dawangliana Govt. of Mizoram, Aizawl Phone: (0389) 324 487, 323 157 Fax: (0389) 323 672

<u>State</u>: Madhya Pradesh <u>Principal Secy. PHED</u>: Rakesh C. Sahni Govt of M.P., Bhopal Phone: (0755) 551 620 Fax: (0755) 556 990

State: Orissa Secretary PHED: A. Samantaray Govt. of Orissa, Bhubaneshwar - 751 001 Phone: (0674) 408 260 Fax: (0674) 404 984 Engineer-in-Chief: N.P. Rath Rural Water Supply & Sanitation Govt. of Orissa Phone: (0674) 407 734 Fax: (0674) 413 146 State/UT Secretaries/ Engineers-in-Chief dealing with Rural Water Supply (cont.) State: Meghalaya <u>Commissioner & Secy</u>: H.K. Mazhari Public Health Engg. Deptt. Govt. of Meghalaya Ralona Building, Sectt. Hill Shillong - 793 001 Phone: (0364) 223 578 Fax: (0364) 225 978 <u>Chief Engineer, PHED</u>: R.B. Purkaysth Govt. of Meghalaya Shillong - 793 001 Phone: (0364) 225 119 Fax: (0364) 223 05, 225 978

<u>State</u>: Nagaland <u>Secretary. PHED</u>: Temjen Toy Govt. of Nagaland, Kohima - 797 001 Phone: (03866) 270 054 Fax: (03866) 215 162 <u>Chief Engineer, PHED</u>: R Saleh Govt. of Nagaland, Kohima - 797 001 Phone: (03866) 221 339 Fax: (03866) 229 727

State: Punjab Secy, D/PH: JR Kundal Govt of Puniab Room No. 616 6th floor, Mini Sectt., Sector-9 Chandigarh Phone: (0172) 743 721 Fax: (0172) 743 721 CE, PWD: Suresh K Gupta Govt. of Punjab The Mall, Patiala Phone: (0175) 212 039 Fax: (0175) 212 029 EE, PHED: DK Bhasin Govt. of Punjab Chandigarh Phone: (0175) 222 756 Fax: (0175) 215 173

State: Rajasthan Secretary PHED: KL Meena Govt. of Rajasthan, Jaipur Phone: (0141) 383 380 Fax: (0141) 383 380, 380 117 CE(RURAL), PHED: SC Mathur Govt. of Rajasthan, Jaipur Phone: (0141) 222 183 CE (Hqrs) PHED: SK Kulshetra Govt. of Rajasthan, Jaipur Phone: (0141) 228 053

<u>State</u>: Sikkim <u>Secretary Rural Dev Deptt</u>: Rinchem Ongmu, Govt of Sikkim Gangtok - 737 103 Phone: (03592) 22 659 Fax: (03592) 22 245, 22 281 <u>CE. Rural Dev Deptt</u>: GD Mimami Tashling Gangtok - 737 103 Phone: (03592) 22 659 Fax: (03592) 220 42

<u>State</u>: Tripura <u>Secy-cum-Commissioner</u>: K.V.Satyanarayan Rural Dev Deptt, Govt of Tripura Agartala - 799 001 Phone: (0381) 223 310 Fax: (0381) 223 310 <u>CE (PWD), PHED</u>: J.K.Malakar Govt of Tripura Malancha Niwas, Kunjaban Agartala - 799 006 Phone: (0381) 224 625 Fax: (0381) 223 110

<u>State</u>: Tamil Nadu <u>Secretary, Dir, HRD Cell</u>: S. Malathi Municipal Admn. & WS Deptt Fort St. George, Govt of Tamil Nadu Chennai - 600 009 Phone: (044) 536 0491 Fax: (044) 538 9866, 852 3537

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State/UT Secretaries/ Engineers-in-Chief dealing with Rural Water Supply (cont.)

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State: Uttar Pradesh Secy, Rural Dev Deptt: Rajendra Bhonwal Govt of Uttar Pradesh Lucknow - 226 001 Phone: (0522) 239 328 Fax: (0522) 238 162 Spl. Secretary (RD): Ramendra Tripathi Govt of Uttar Pradesh Lucknow - 226 001 Phone: (0522) 237 073 Commissioner (Rural Devpt): P.Umashankar Govt of Uttar Pradesh Lucknow - 226 001 Phone: (0522) 280 403, 280 648 Fax: (0522) 280 667 MD, UP Jal Nigam: HS Jethwani **RP** Marg Lucknow - 226 001 Phone: (0522) 222 389, 224 418 Fax: (0522) 220 172

State: West Bengal Principal Secretary, PHED: R K Tripathy New Sectt Bldg,1, KS Roy Rd. Govt. of W. Bengal, Calcutta Phone: (033) 248 6769, 248 6407 Fax: (033) 248 4146, 248 6436 Chief Engineer, PHE: SN Mukherjee No.1 KS Roy Road Govt. of W. Bengal, Calcutta Phone: (033) 248 2901 Fax: (033) 248 6436 State: Pondicherry Secretary (Plg.) cum-Devpt Commissioner & Secy (Fin.): R Padmanabhan UT of Pondicherry - 605 001 Phone: (0413) 334 484, 334 144 Fax: (0413) 346 107 e-mail: dc@pondy.pon.nic.in <u>PWD CE</u>: S Chinnaswamy Govt. of Pondicherry 34, Lal Bahadur Shastri Street Pondicherry - 605 001 Phone: (0413) 336 394 Fax: 0413-337575

State: Delhi <u>Chief Executive Officer</u>: Pradeep Mehra Delhi Jal Board, DWSSD Varunalaya Phase-II Jhandewalan, Karol Bagh, Delhi Phone: (011) 354 4795, 351 1658 Fax: (011) 753 5939 <u>Engr-in-Chief</u>: SK Chhabra Delhi Jal Board, DWSSD, Varunalaya, Phase-II Jhandewalan, Karol Bagh, New Delhi Fax: (011) 231 005

<u>State</u>: Lakshwadeep U T <u>Superintending Engineer</u>: AM Kasmi Koya Admn of UT of Lakshwadweep Kavarathi – 682 555 Phone: (04896) 622 62, 623 38 Fax: (04896) 633 67 E-mail: lk.pwd@x400.nicgw.nic.in

State: Daman & Diu U T <u>Development Commissioner (PWD)</u>: Ramesh Negi UT of Daman & Diu Moti Daman Phone: (02638) 577 00 Fax: (02638) 633 67 <u>SE (PWD)</u>: DK Veghela UT of Daman & Diu Moti Daman Phone: (02638) 423 50 The Water and Environmental Sanitation Sector in India

State/UT Secretaries/ Engineers-in-Chief dealing with Rural Water Supply (cont.)

52

<u>State</u>: Dadra & Nagar Haveli U T <u>Ex. Engineer PWD</u>: IM Lad D & NH Silvassa <u>State</u>: Chandigarh U T <u>Fin Secy-cum-Secy (Engg</u>): Rakesh Singh

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Chandigarh Administration Room No. 412, UT Sectt. Sector-9 Chandigarh Phone: (0172) 741 105 Fax: (0172) 741 747, 741 503 Chief Engieer C.E.: R.K. Jain U/T of Chandigarh UT Sectt, Sector 9 Chandigarh Phone: (0172) 741 340 Fax: (0172) 742 733



Central Ground Water Board

Jamnagar House, Mansingh Road, New Delhi- 110 011 Phone: (011) 338 3561, 338 3851 Fax: (011) 307 3092, 338 6743, 338 3824

Key Personnel

D K CHADDHA, Chairman Phone: (011) 338 3561 E-mall: niccgwb@sansad.nic.in

S K SHARMA, Member (Survey, Assessment and Monitoring) Phone: (011) 338 3851 E-mail: niccgwb@sansad.nic.in

A N BHOWMICK, Member Secretary (Central Ground Water Authority) Phone: (011) 332 5079 E-mail: cgwa@vsnl.net.in

S S CHAUHAN, Member (Exploratory Drilling & MM) Phone: (011) 541 2839 E-mail: medmm@nic.in

S P SINHARAY, Member (Sustainable Management & Lialsoning) Phone: (011) 541 9105 E-mail: msml@nic.in

Number of Ground Water Scientists/Engineers: 2000

Organisation The Central Ground Water Board is a National apex organisation with responsibilities to carry out scientific surveys, exploration, monitoring of development, management and regulation of the country's vast ground water resources for irrigation, drinking and industrial needs.

The main activities of the Board are hydrogeological surveys, ground water exploration, nation-wide monitoring of the behaviour of water table and water quality, ground water resource assessment, monitoring of ground water development and management of ground water resources. The data generated from these investigations provide a scientific base for user agencies. Besides advising States and other user agencies on planning and management of ground water development schemes, the Board is also taking up special studies on research and development, conjunctive use of surface and ground water, artificial recharge, water balance and ground water pollution, etc. It also organises various

53

training courses for personnel of its own, as well as for other Central, State Government Organisations and public undertakings.

Established in 1954, CGWB functions under the Ministry of Water Resources, Government of India. A Chairman and four members, under whom 16 Regional Offices function in different State capitals, headed by Regional Directors, head the Board. The Regional Offices have 16 Divisions, and 10 Unit offices, located in Union Territories and States. It has about 5,000 scientific and engineering personnel to cater to the responsibilities.

Mandate "Develop and disseminate technologies and monitor and implement national policies for the scientific and sustainable development and management of India's ground water resources including their exploration, assessment, conservation, augmentation, protection from pollution and distribution, based on principles of economic and ecological efficiency and equity."

Fuctions and Responsibilities

- Monitor and guide ground water development to promote its sustainable management on principles of ecology, economic and energy use efficiency and equity.
- Periodically assess the country's ground water and publish once in five years a report, on the state of India's ground water resources.
- Draw up perspective basin or sub-basin plans for harnessing these resources in a phased manner.
- Develop, refine and disseminate, on its own as well as in co-ordination with other agencies, basin specific technologies for sustainable ground water development and management including priority areas such as conjunctive use of ground water and surface water including brackish or sea water, augmentation and conservation including artificial recharge, pollution and saline ingress, and the location, design, operation and maintenance of ground water extraction structures and devices, recycling and reuse of water and solutions of urban problems.
- Plan augmentation, conservation, protection and regulation of ground water resources keeping in view the existing and future ground water scenario.
- Evolve a National Information System in collaboration with state Governments and other agencies to collect, store, process and disseminate ground water data as part of an overall water resources data bank.
- Forecast the manpower, equipment, energy and financial requirements for the ground water sector in the context of demand projections.
- Promote the economic and efficient use of manpower, energy and equipment employed in the ground water sector through various measures including setting up performance appraisal and management information system, training, development of technical and managerial skills and personnel development.
- Support and co-ordinate the efforts of State Ground Water Organisations for the planned development of their ground water resources on the above lines, specially where inter-state issues arise.
- Foster international co-operation to promote scientific exchanges, acquisition of useful technology including the use of renewable sources of energy for pumping ground water and assistance to other developing countries.

- In co-ordination with the State Governments, establish benchmarks and methodologies for ground water studies.
- Promote environmental awareness and water quality consciousness associated with the use of ground water.
- Organise facilities for research and training in ground water management involving appropriate institutions and universities in order to foster the growth of a national grid of R&D Institutions covering different aspects of ground water conservation and utilisation.
- Develop linkages with social science Institutions in order to give adequate attention to the social engineering aspects of ground water saving and sharing.
- Foster linkages with users through demonstration and a well organised communication and information system and by preparing educational resources for the media and for extension training Institutions.
- Promote and wherever necessary undertake anticipatory research on the potential impact of global climate change on India's ground water resources.

Activities Of The Board Major field activities of the Central Ground Water Board are listed below:

- Systematic hydro-geological surveys (completed)
- Reappraisal hydro-geological surveys
- Hydrograph network monitoring programme for evaluating behaviour of ground water systems and water quality regime
- · Ground water exploration aided by drilling
- Construction of production wells as deposit works
- · Water supply investigations for rural, urban, defence and other agencies
- Scientific source finding under Rajiv Gandhi National Drinking Water Missions launched by the Ministry of Rural Areas & Employment
- Experimental Pilot Project Studies for augmentation of ground water storage by artificial recharge
- Special ground water study projects including conjunctive use of ground water and surface water in canal commands
- Assistance to States in planning water development programmes
- Technical examination of surface water resources development project with respect of ground water component
- Training of personnel and Extension Services Programmes
- Ground Water Pollution Studies

The Central Ground Water Board was constituted, as Authority for a period of one year vide a Gazette Notification No. S.O. 38(E) dated 14th January, 1997 issued by the Ministry of Environment & Forest under section 3(3) of Environment (Protection) Act, 1986. The term of the Authority has been extended upto five years vide Gazette Notification No. S.O. 40(E) dated 13th January, 1998.

Central Ground Water Authority was constituted with a view to regulate indiscriminate boring and withdrawal of ground water in the country and to issue necessary regulatory direction to protect and preserve ground water.

Functions of the Authority

- 1. Notifying areas for the protection and conservation of ground water from pollution and depletion.
- Regulating construction of wells, borewells, tubewells, and any other ground water abstraction structure.
- 3. Issuing of guidelines for conservation of ground water.
- 4. Give directions for re-circulation of water in industry including hotel, tourism and related areas.
- 5. Issue directions for the protection of ground water consequent to human interference in natural processes.
- Promulgate directions for monitoring the behaviour of ground water system and quality regime.
- Formulate guidelines for augmenting ground water recharge, conservation of water and recharge of treated urban waste water using conservation of water using roof-top and storm run-off recharge of the treated urban water etc.
- 8. Direction of identify and monitoring of ground water vulnerable zones.
- 9. Technical clearance of schemes by the State Governments, financial and other Agencies.
- 10. Issue guidelines for maintenance of ground water level at minimum depth below ground in different areas.
- 11. Issue directions and take measures for the implementation of the above guidelines and all matters relevant in this connection.
- 12. Formulate and issue guidelines for data collection and setting up of Information Centres at the various levels.
- 13. Recommend norms for the allocation of ground water for the various sub-sectoral uses like domestic, irrigation and industry and suggest interest priorities.
- 14. Issue direction for the identification and monitoring of ground water vulnerable areas.
- 15. Issue directions for the control of wastage of water in artesian wells.
- 16. Any other function as may be considered expedient may be notified by the Authority in a similar manner at the sub-rule (1) above.

Regional Directorates Of Central Groundwater Board

Region: Northern <u>Director</u>: P C Chaturvedi Central Ground Water Board Bhujal Bhavan, Sector-B, Sitapur Road Yojna , Ram Bank Chauraha Lucknow - 226 021, U.P. Phone: (0522) 363 820, 360 494-98 Fax: (0522) 361 177, 362 276

Region: North Western Director: M D Nautiyal Central Ground Water Board S.C.O-3, Sector-26 Chandigarh - 160 019 Punjab, Haryana & UT of Chandigarh Phone: (0172) 770 980, 784 554 Fax: (0172) 770 980 Region: Southern Director: Y J Pardhasarthy Central Ground Water Board 3-6-291, Sadhana building 1st Floor, Hyderguda Hyderabad - 500 029, A.P. Phone: (040) 322 2873, 322 5465 Fax: (040) 322 2873

Region: South Western Director: D S S Murthy Central Ground Water Board 31st Cross, 11th Main Block 4 Jayanagar, Bangalore - 560 011 Karnataka & Goa Phone: (080) 663 1336 Fax: (080) 634 8442

<u>56</u>

Region: Eastern Director: B M Jha Central Ground Water Board Eastern Region, "Bhujalika" CP Block-6, Sector-V Bidhannagar, Calcutta - 700 091 West Bengal, Sikkim and Andaman & Nicobar Islands Phone: (033) 367 3080, 367 3081 Fax: (033) 229 6670

Region: South Eastern Director: B M Jha Central Ground Water Board Bhujal Bhawan, Khadagiri Chhak (NHS) Bhubaneshwar - 751 030, Orissa Phone: (0674) 470 332, 470 357 Fax: (0674) 471 902

Region: Western Director: S.K. Doshi Central Ground Water Board 6-A, Jhalna Doongri Jaipur - 302 004 Rajasthan Phone: (0141) 518 438, 510 284 Fax: (0141) 519 691

Region: West Central Director: A K Sinha Central Ground Water Board Swami Narain College Building Shah Alam Tolnaka Ahmedabad - 380 022 Gujarat and Daman & Diu Phone: (079) 532 0476, 539 4464 Fax: (079) 535 6676

Region: Central Director: S K Sharma Central Ground Water Board N.S. Building, Civil Lines Nagpur - 440 001 Maharashtra and Dadra & Nagar Haveli Phone: (0712) 534 314, 434 415 Fax: (0712) 522 460 Region: Kerala Director: M C Jindal Central Ground Water Board Kedaram Kesavadasapuram Trivendrum - 695 004 Kerala & Lakshwadeep Phone: (0471) 442 191, 442 175 Fax: (0471) 442 191

Region: North Central Director: Saleem Romani Central Ground Water Board Block-1, 4th Floor, Paryawas Bhawan Area Hills, Jail Road Bhopal - 462 011 West Madhya Pradesh Phone: (0755) 557 639, 760 090 Fax: (0755) 760 090

Region: North West Himalayan Director: A Srisalanath Central Ground Water Board Ruby Shopping Complex Sanjay Nagar, Jammu - 180 001 Jammu & Kashmir and Himachal Pradesh Phone: (0191) 451 626, 452 141 Fax: (0191) 454 080

Region: North Eastern <u>Director</u>: M Mehta Central Ground Water Board Tarun Nagar, Bye Lane 1 near Rajiv Bhawan, Guwahati - 781 005 North East States Phone: (0361) 560 358 Fax: (0361) 459 161

Region: Mid Eastern Director: R P Aggwarwal Central Ground Water Board Mahatama Gandhi Nagar Kanti Factory Road, Kankarbagh Patna - 800 029, Bihar Phone: (0612) 231 785 Fax: (0612) 229 531

State Unit Offices Of Central Groundwater Board

Region: South East Coastal Director: D S S Murthy Central Ground Water Board E-Wing, G-Block Rajaji Bhavan, CGO Complex Besant Nagar, Chennai – 600 090 Tamil Nadu & Pondicherry Phone: 044-4914334, 4914494 Fax: 044-4914334

State: NCT of Delhi S B Singh Central Ground Water Board 16/11, Jamnagar House, Mansingh Rd New Delhi – 110 011 Phone: 011-3073093 Fax: 011-3386743

<u>State</u>: Tripura B.B. Bhattacharya Central Ground Water Board Dhaleshwar Road No.11 Agartala - 799 007 Phone: 0381-225876

<u>State</u>: North Karnataka & Goa S V Chougala Central Ground Water Board North Karnataka Unit 4642, B-16 2nd Main, 2-A Cross Sadashiv Nagar, Belgaum – 590 001 Phone: 0831-473160

<u>State</u>: Uttar Pradesh Akhtar Jamal Central Ground Water Board Hotel Chandragupta 3rd Floor, Bareilly Phone: 0581 – 451613

State: West Maharashtra and Dadra & Nagar Haveli D B Shetty Central Ground Water Board 217/11, Deccan College Road Yarvada, Pune – 411 006 Phone: 020-6693909 Region: North Central Chattisgarh Director: Sobnath Ram Central Ground Water Board R-16, Anupam Nagar Raipur – 492 007 East Madhya Pradesh Phone: 0771-283138 Fax: 0771-282087

<u>State</u>: Himachal Pradesh S.C Dhiman Central Ground Water Board House No.3 (HIG) H.P. Housing Board Colony Kangra, Himachal Pradesh Phone: 01892-64317 Fax: 01892-65223

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<u>State</u>: Arunachal Pradesh G C Shah Central Ground Water Board Vivek Vihar Ganj Itanagar – 791 113 Phone: 33428

<u>State</u>: West Rajasthan R P Mathur Central Ground Water Board 64, Polo-1, Paota Jhodhpur – 342 006 West Rajasthan Phone: 0291-547614

<u>State</u>: Uttrar Pradesh Kamal Mehmood Central Ground Water Board 276, Kaushambi Road Chakla, Allahabad ~ 211 016 Phone: 0532-617597





CAPART

(Council for Advancement of People's Action & Rural Technology)

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Key Priorities/ Future Directions/ Policies

60

Goals and Objectives

CAPART works with the objective of improving the quality of life in the rural areas, particularly the poor and socially disadvantaged sections of society. Thus, people below the poverty line, people belonging to the scheduled castes and tribes, bonded labour; women and people with disabilities are priority focus groups for CAPART.

The major goals of CAPART are:

- To support voluntary organizations in implementing projects for sustainable development in rural areas.
- To act as a national nodal point for development and promotion of appropriate rural technologies.
- To promote and support voluntary action and people's participation for rural development, through capacity building for voluntary organizations and rural communities.
- To act as a data bank and clearing house for information on the voluntary sector, rural technologies and rural development.
- Facilitating community action for development.
- Building awareness on critical development issues.
- Building and strengthening village-level people and organizations.
- Promoting the development and dissemination of appropriate rural technologies.
- Strengthening the capacities of voluntary organizations in rural areas.

- Creating employment opportunities and economic self-reliance.
- Creation of community assets and fulfillment of basic needs.
- · Conservation and regeneration of the environment and natural resources.
- Enabling women, persons with disabilities and other disadvantaged groups to participate in development.

In pursuit of these goals, CAPART provides financial and resource support to voluntary organizations in conceptualizing, developing and implementing a wide range of projects and development interventions.

CAPART receives the bulk of its funds from the Government of India. We also have partnerships with international donors to facilitate routing of funds to voluntary organizations working for rural development.

CAPART functions through the following divisions:

Rural technology

As the national nodal agency for promotion of rural technologies, CAPART supports projects under the Advancement of Rural Technologies (ARTS) scheme, for adaptation and dissemination of existing technologies, as well as development of new and innovative rural technologies. Schemes for technology transfer through training for voluntary workers and members of rural communities are also supported.

This division coordinates a network of 18 Technology Resource Centers to promote and build capacities for technology transfer in the voluntary sector. A newsletter, the TRC Bulletin, shares information on new technologies and path breaking innovations. Apart from support to voluntary agencies, this division also supports individual innovators, in developing adapting and commercializing appropriate technologies. Similarly, direct support is provided to rural artisans through a scheme for distribution of toolkits.

List of Technologies

- Fire Proof Thatch
- Rain Water Harvesting
- Improved Crematorium
- NADEP Composting Technology
- Coconut Leaf Thatch Roofing
- TARA Handloom
- Random Rubble Blocks
- Guna Tile Roofing
- Ferro Cement Roofing

- Earth Resistivity Meter
- Geodesic Dome
- Hydram
- Single Phase Welding Transformer
- Gasification
- Water Mills
- Vermiculture
- Lantana Utilization
- Solar Photovoltaic Technology

Public Cooperation/Organisation Of Beneficiaries

The PC Division works with the broad mandate of facilitating people's movements for rural development. Projects for social mobilization to challenge oppressive and unjust social structures and projects to create conditions for empowerment of the rural poor are supported. The division also supports composite multi dimensional schemes aiming at increasing production and employment opportunities for the small and marginal farmers. Under the scheme for promotion of voluntary action for rural development it promotes innovative schemes not covered under any other programme of CAPART. New sub-guide-lines formed on Micro-Planning, Micro-Finance, Drought proofing & Disaster Mitigation. The scheme also supports empowerment of weaker sections like SC, ST, Bonded labour, child labour, women, disabled etc. helping them in getting their rights even through mass-mobilisation. Transparency and right to information & capacity building form the focal areas of funding.

Disability Action

The Disability Action Division was set up in 1995 to facilitate the equalization of opportunities for people with disabilities in rural development. Support is provided to innovative projects, which promote social mobilisation and community-based action on disability issues. Focus areas include formation of village-level organisations and self-help groups of people with disabilities, capacity building for development workers, rural artisans and people with disabilities for development of appropriate technologies and economic skills, and support to initiatives for self-employment. Facilitation centers for training have been set up.

CAPART is the first national agency to act on the mandate of the "Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation)" Act. 1996, and earmark three per cent of its resources for people with disabilities.

Watershed Development

The Watershed Development Division constituted in March 1995 works towards the integrated development of micro-watersheds in rural areas. Conservation and regeneration of soil and water, enhancing the biomass and productivity of the ecosystem and provision of employment and economic opportunities to the community, are priorities. The CAPART assistance is divided among four components – 75 per cent for watershed treatment/development work, five per cent each for community organisation and training and 15 per cent for meeting administrative overheads/Entry Point Activity. Emphasis is on training through support voluntary Organizations (Vos).

Profiles of Government and Donor Programmes

Donor Agencies



Asian Development Bank

37, Golf Links, Archbishop Makarios Marg, New Delhi – 110 003 Phone: (011) 469 2578 Fax: (011) 463 6175

Key Personnel

ALEX K JORGENSEN, Senior Project Implementation Officer E-mail: ajorgensen@adb.org

M ALAM, Project Implementation Officer E-mail: munawaralam@adb.org

V V SUBRAMANIAN, Investment officer E-mail: vsubramanian@adb.org

Sector Programme Size: US\$ 1929.62 million (Loan: US\$ 1604.62 million)

Key Priorities/ Future Directions/ Policies

Asian Development Bank Water and Environmental Sanitation Policy

The strategic development objectives of the Bank are five-fold:

- Promoting economic growth;
- Reducing poverty;
- Supporting human development;
- Improving the status of women; and
- Protecting the environment.

The primary objective of a given Bank-assisted urban development project depends on the nature of physical investments and the relative composition of such investments across several sub-sectors. In accordance with the Bank's classification system, the primary objective of such sector projects is, typically, to promote human development. However, investments in urban infrastructure and housing often have positive, secondary impacts on reducing poverty, promoting economic growth, improving the status of women and protecting the environment.

Key Document: India's Urban Sector Strategy, Asian Development Bank, 1998.

66

In India, the Bank's overall strategic thrust is to assist the government in promoting efficient and sustainable economic growth to improve employment opportunities and reduce poverty. By supporting the development of urban infrastructure, providing long term funds for housing finance, and developing sustainable mechanisms for the delivery of social services, the Bank is increasingly integrating social welfare concerns into the strategy.

Through its technical assistance and lending programmes, the Bank will also promote policy reform measures to address the existing legal, institutional, and financial problems confronting the urban sector. These reform measures will be aimed at liberalising the land and housing markets to attract greater private sector investment into the sector. The Bank's urban sector programmes in India will also incorporate capacity building and institutional strengthening initiatives aimed at promoting sustainable urban management.

The approach towards India's urban sector is consistent with the Bank's Country Operational Strategy, particularly in addressing the social dimensions of population and economic growth in India. It advocates that the Bank pursues a more State-focused intervention strategy in areas/sectors under State government domain. Urban infrastructure is specifically identified as one area of proposed Bank support for social interventions within the State-focused operations. Although the Bank's current assistance programme is focused in two States, namely Gujarat and Madhya Pradesh, this does not necessarily limit the geographic scope of the Bank's urban sector assistance programme in India at the national level. Future technical assistance and lending activity in the urban sector will be determined in close consultation with the government and will reflect priority issues and problems facing India's urban areas.

The Bank's principal activity in the urban infrastructure and services sub-sector will be to finance Integrated Urban Development Projects (IUDPs). However, in an effort to develop more sustainable mechanisms to finance urban infrastructure and to improve local governments' access to capital, the Bank is investigating the feasibility of creating an urban environmental infrastructure fund to achieve these objectives.

Future IUDPs in India should be demand-driven, with key criteria being local governments' willingness to initiate policy reform measures as part of the project. The absorption capacity of local governments should be reflected in the overall design of IUDPs; projects should be reasonable size and scope, both in terms of the number of project towns and investment sub-sectors, to facilitate smooth implementation. To the extent possible, project execution should be through existing institutions, particularly local governments, in an effort to strengthen their capacities in the areas of urban planning, financial management, project implementation, procurement and community development. IUDPs should also be used to introduce and implement different cost-recovery mechanisms and privatisation measures, especially for water supply and solid waste sub-projects to ensure financial sustainability.

In an effort to respond to India's urban and environmental infrastructure investment needs, the Bank is providing technical assistance to the Government of India to structure the pro-

posed Urban and Environmental Infrastructure Fund (UEIF) to attract both public and private sector capital, to finance commercially viable projects. Technical assistance leading to the development of UEIF includes (i) analysis of investment requirements and the potential for commercialisation; (ii) analysis of policy and implementation issues and constraints; (iii) evaluation of options for financing, including Bank assistance in mobilising domestic currency funds; (iv) evaluation of fund structure options; (v) evaluation of project preparation and award processes; and (vi) specification of conditions and incentives for attracting official development financing and private sector participation.

The UEIF is also consistent with India's Mega City Scheme, a centrally sponsored programme almed at financing urban infrastructure development in the cities of Calcutta, Mumbai, Chennai, Hyderabad and Bangalore. The scheme involves pooling of funds between the Central government and State governments in 25:25 ratio; and the 50 per cent balance is mobilised as institutional finance, either through financial institutions or the capital market. The funds under the scheme are channelled through a specialised institution/nodal agency at the State level that, in turn, provides project-related finance for urban infrastructure projects. Criteria for receiving project funding include the adoption of appropriate means, either direct or indirect, to recover costs. Priority is given to projects that include private sector participation.

The Bank views UEIF as a principal means of financing individual sub-projects covering water supply, waste water, solid waste and industrial estate infrastructure development. Policy reform initiatives would include the institution of market-based user charges and tariffs, potential changes to the Income Tax Act to allow for sharing depreciation deductions of jointly owned assets, the institution of government guarantees and risk mitigation measures, and different means to streamline the permitting and approval process for UEIF projects.

Projects: Current

building, cost recovery

Project Name	Location: Karnataka
Loan No. 1415-IND: Karnataka Urban	Value: US\$ 112 million (Loan: US\$ 85 million)
Infrastructure Development Project	<u>Contact</u> : Alex K Jorgensen, Senior Project Implementation Officer M Alam, Project Implementation Officer
	Start Date: 14 December 1995
	Completion Date: 30 June 2002
	<u>Key Partner</u> : Urban Development Department, Karnataka Urban Infrastructure, Development and Finance Corporation
	Key Words: urban water supply, urban sanitation, solid waste management, capacity

Project Name

Location: Karnataka

Loan No. 1416-IND: Karnataka Urban Infrastructure Development Project Value: US\$ 20 million (Loan)

Contact: Alex K. Jorgensen, Senior Project Implementation Officer M. Alam, Project Implementation Officer

Start Date: 14 December 1995

Completion Date: 30 June 2002

Key Partner: Housing Development Finance Corporation Ltd.

Key Words: urban water supply, urban sanitation, solid waste disposal, capacity building, cost recovery

<u>Project Name</u>

Loan No. 1647-IND: Rajasthan Urban Infrastructure Development Project

Value: US\$ 362 million (Loan: US\$ 250 million)

Contact: Alex K Jorgensen, Senior Project Implementation Officer M. Alam, Project Implementation Officer.

Start Date: 3 December 1998

Location: Rajasthan

Completion Date: 30 June 2005

Key Partner: Urban Development Department, Government of Rajasthan

Key Words: urban water supply, urban sanitation, solid waste disposal, capacity building, cost recovery

Project Name Location: National

Housing Finance Loan Nos.: 1549, 1550, and 1551 to (i) National Housing Bank; (ii) Housing and Urban Development Corporation; (iii) Housing Development Finance Corporation Value: US\$ 300 million (Loan)

Contact: T Kandiah, Senior Investment/Programs Officer V V Subramanian, Investment Officer

Start Date: 25 September 1997

Completion Date: 30 June 2003

<u>Key Partner</u>: National Housing Bank, Housing and Urban Development Corporation, Housing Development Finance Corporation

Key Words: private sector participation, transforming institutions, management of service providers

68

Project Name

Loan No.1704-IND: Karnataka Urban Development and Coastal Environmental Management Value: US\$ 251 million (Loan: US\$175 million)

<u>Contact</u>: Alex K. Jorgensen, Senior Project Implementation Officer M Alam, Project Implementation Officer

Start Date: 26 October 1999

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Location: Karnataka

Completion Date: 30 June 2005

Key Partner: Urban Development Department, Karnataka Urban Infrastructure, Development and Finance Corporation

Key Words: urban water supply, urban sanitation, solid waste disposal, capacity building, cost recovery

Project Name Location: National

Urban and Environmental Infrastructure Facility Loan Nos.1719, 1720, and 1721 to (i) Housing & Urban Development Corp. Ltd; (ii) ICICI Ltd and (iii) Infrastructure Development Finance Co. Ltd. Value: US\$ 200 million (Loan)

Contact: Alex K. jorgensen, Sr. Project Implementation Officer M. Alam, Project Implementation Officer

Start Date: 17 December 1999

Completion Date: September 2006

Key Partner: HUDCO, ICICI, and IDFC

<u>Key Words</u>: community participation, cost recovery, demand assessment, hygiene promotion, operation and maintenance, policy reform, private sector participation, public sector reform, technical studies

Project Name Location: New Delhi

TA No.3423-IND: Environmental Management at the State Level

Value: US\$ 3,620,000 (Grant)

<u>Contact</u>: Alex K. Jorgensen, Senior Project Implementation Officer M. Alam, Project Implementation Officer

Start Date: October 2000

Completion Date: December 2002

Key Partner: Ministry of Environment and Forest

Key Words: cost recovery, environment, environmental health, management of service providers, operations and maintenance, policy reform, technical studies

Project Name

TA No.3344-IND: Strengthening Microfinance Institutions for Urban and Environmental Infrastructure Finance Location: New Delhi

Value: US\$ 500,000 (Grant)

Contact: Alex K Jorgensen, Senior Project Implementation Officer M Alam, Project Implementation Officer

Start Date: October 2000

Completion Date: 30 April 2002

Kev Partner: Housing and Urban Development Corporation Ltd

<u>Key Words</u>: cost recovery, demand assessment, environment, hygiene promotion, micro financing, NGOs, policy reform, research, urban sanitation

<u>Project Name</u>

Location: New Delhi

Value: US\$ 500,000 (Grant)

TA No. 3209-IND: Strengthening Institutional Capacities for Urban Infrastructure Finance and Development

Contact: Alex K Jorgensen, Senior Project Implementation Officer M Alam, Project Implementation Officer

Start Date: 21 September 1999

Completion Date: 31 December 2000

Key Partner: Ministry of Urban Affairs and Employment

<u>Key Words</u>: cost recovery, demand assessment, management of service providers, operation and maintenance, policy reform, public sector reform, research, urban sanitation

Project Name

TA No. 3365-IND: Capacity Building for Social Development Value: US\$ 800,000 (Grant)

Location: New Delhi

<u>Contact</u>: Alex K Jorgensen, Senior Project Implementation Officer M Alam, Project Implementation Officer

Start Date: 28 January 2000

Completion Date: 31 December 2001

Key Partner: Ministry of Urban Affairs and Employment

Key Words: cost recovery, demand assessment, management of service providers, operation and maintenance, policy reform, public sector reform, research

70

Projects: Proposed

<u>Project Name</u>	Location: West Bengal
Calcutta Environmental Improvement Project	Value: US\$ 360.0 million (Loan: US\$ 250.0 million)
	<u>Contact</u> : Alex K Jorgensen, Senior Project Implementation Officer M Alam, Project Implementation Officer
	Key Partner: The Calcutta Municipal Corporation
	<u>Key Words</u> : urban water supply, urban sanitation, solid waste disposal, capacity building, cost recovery
Project Name	Location: Delhi
Reducing Poverty in Urban India	Value: US\$ 300,000 (Grant: US\$ 300,000)
	<u>Contact</u> : Alex K Jorgensen, Senior Project Implementation Officer M Alam, Project Implementation Officer
	Start Date: November 2000
	Completion Date: November 2001
	Key Partner: Ministry of Urban Development
	Key Words: cost recovery, demand assessment, health, hygiene promotion, manage- ment of service providers, poverty, policy reform, urban sanitation
Project Name	Location: National
Housing Finance II	Value: US\$ 300 million (Loan)
	<u>Contact</u> : T Kandlah, Senior Investment/Programs Officer V V Subramanian, Investment Officer
	Start Date: August 2000
	Completion Date: September 2005
	Key Partner: Infrastructure Development Finance Corporation, Housing Urban Development Corporation, Housing Development Finance Corporation
	Key Words: private sector participation, transforming institutions, management of service providers

The Water and Environmental Sanitation Sector in India

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Australian Agency for International Development (India Programme)

Development Co-operation Section, Australian High Commission, 1/50G Shantipath, Chanakyapuri, New Delhi – 110 021 Phone: (011) 688 8223, 688 5556, 687 3025 Fax: (011) 688 7492

<u>Number of water and sanitation professional staff</u>: No in-house specialists based in Delhi. Specialists sourced from Advisory Services Group in AusAid Canberra.

Key Personnel

KERRY GROVES, First Secretary (DC) E-mail: kerry.groves@dfat.gov.au

RAMESH SUBRAMANIAN, Senior Project Officer (Urban WES) E-mail: ramesh.subramanian@dfat.gov.au

SUSAN KOSHY, Senior Project Officer (Rural WES) E-mail: susan.koshy@dfat.gov.au

Sector Programme Size: Overall approximately AUD 20 million annually (Grant)

Key Priorities/ Future Directions/ Policies

AusAID's Regional Water and Environmental Sanitation Policy

The South Asian region faces growing environmental problems, coastal erosion, and growing urban and industrial pollution. Environmental problems are especially serious in India due to rapid urbanisation, dense housing, urban slums, and rapid industrialisation. India has developed an environmental strategy, a legal framework, institutions, and programs. Water resource management has become a central need in many parts of rural India where scarcity of surface water and depletion of ground water has created serious stress on drinking water and household needs and on community livelihoods.

73_

Australia will continue its assistance in the areas of (a) upgradation of water sanitation and sewerage services (b) policy assistance (c) support towards institutional development and capacity building (d) water resource management (e) address the needs of vulnerable communities particularly the poor and women.

Projects: Current

Project Name

Bangalore Water Supply and Environmental Sanitation Master Plan Project Location: Karnataka Value: Rs 20 crore estimated (AUD 7.7 million - Grant) Contact: Kerry Groves, First Secretary, Development Co-operation Section Start Date: May 2000 Completion Date: April 2000 Key Partner: Bangalore Water Supply & Sewerage Board

Key Words: urban water supply, urban sanitation, environment, poverty, hygiene promotion, policy reform, solid waste management, community participation, NGOs, transforming institutions, capacity building, public sector reform, gender, cost recovery, water quality, water resources management, research

Projects: Proposed

Project Name

Location: Sikkim

Gangtok Urban Water Supply and Environmental Sanitation Project

Value: AUD 36 million (Rs 94 crores - Grant, over two phases)

Contact: Kerry Groves, First Secretary, Development Co-operation Section

Start Date: April 2001 (expected)

Completion Date: 2009

Key Partner: Public Health Engineering Department, Government of Sikkim

<u>Key Words</u>: urban water supply, urban sanitation, environment, poverty, hygiene promotion, policy reform, solid waste management, community participation, NGOs, transforming institutions, capacity building, public sector reform, gender, cost recovery, water quality, water resources management, research

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Project Name

<u>1e</u> <u>Location</u>: Meghalaya

Shillong Urban Environmental Sanitation Services Improvement Project Value: AUD 10-15 million (about Rs 25 to 37 Crore - All Grant)

Contact: Kerry Groves, First Secretary, Development Co-operation Section

Start Date: April 2001 (expected)

Completion Date: 5-7 years project time-frame

Key Partner: Public Health Engineering Department, Government of Meghalaya

<u>Key Words</u>: urban water supply, urban sanitation, environment, poverty, hygiene promotion, policy reform, solid waste management, community participation, NGOs, transforming institutions, capacity building, public sector reform, gender, cost recovery, water quality, water resources management, research

Project Name Location: Madhya Pradesh

Madhya Pradesh Rural Communities Water Resources and Environmental Sanitation Awareness Project Value: AUD 10-11 million (about Rs 25-27 Crore - All Grant)

Contact: Alex Knox, Second Secretary, Development Co-operation

Kev Partner: Public Health Engineering Department, Government of Madhya Pradesh

Key Words: community participation, environment, gender, health, hygiene promotion, NGOs, water quality, water resources management

Projects under consideration

Hamirpur Rural Water Supply & Sanitation Project Contact: Alex Knox

Completed Projects

Orissa Groundwater Development Project Keshopur Sewage Management Project

The Water and Environmental Sanitation Sector in India

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Canadian International Development Agency (CIDA)

Canadian High Commission, Chanakyapuri, New Delhi – 110 021 Phone: (011) 687 6500 Fax: (011) 688 6478

<u>Number of water and sanitation professional staff</u>: Water and environmental sanitation Specialists sourced from consultants

Key Personnel

STEVEN RAYFIELD, Counsellor, Development E-mail: steve.rayfield@dfait-maeci.gc.ca

Sector Programme Size: Canadian \$ 76 million (Grant Aid)

Key Priorities/ Future Directions/ Policies

CIDA Water and Environmental Sanitation Policy

- Basic human needs especially primary health care, basic education, family planning, nutrition, water and sanitation, and shelter.
- Women in development support is provided to ensure the full participation of women as equal partners in the sustainable development of their society.
- Support for infrastructure ~ emphasis is placed on poorer population groups and on capacity building.
- Human rights, democracy, good governance to ensure respect for human rights, including children's right and to strengthen both civil society and the security of the individual.
- Private sector development to promote sustained and equitable economic growth by supporting private sector development.
- Environment to help developing countries protect their environment and to contribute to addressing global and regional environmental issues.

The goals of the Canadian co-operation with India are:

- To promote sustainable development.
- To contribute to the transition to a mature economic and political relationship between India and Canada.

78_____

- To promote economic and social policy reforms in India.
- To contribute to India's capacity to promote environmentally sound development.
- To assist in building a stronger economic relationship between India's and Canada's private sectors.

Support to the governance process and gender-equity, and promoting increased and effective participation of the vulnerable sections of the population in governance and development, are integrated in Canadian co-operation. Programme delivery emphasizes the concept of partnership through promotion of cross-cultural linkages.

Canadian development co-operation seeks to go beyond government-to-government relationships and lay the basis for a broader alliance built on private (profit and non-profit) initiatives and institutional partnerships in areas of mutual interest and benefit. These areas include support to India's social and economic policy reforms, the environment and long term business relationships.

Projects: Current

Project Name	Location: Rajasthan
Rajasthan Agricultural Drainage Research Project	Value: Canadian \$ 62.07 million (Grant)
	Contact: Steven Rayfield, Counsellor, Development
	Start Date: 1987
	Completion Date: December 2000
	Key Partner: Government of Rajasthan
	Key Words: capacity building, environment, operation and maintenance, technical
	studies, research, rural water supply, water resources management
<u>Project Name</u>	Location: Karnataka
Environment Regeneration Project	Value: Canadian \$ 1.035 million (Grant)
rite Sta	Contact: Steven Rayfield, Counsellor, Development
	Start Date: 1998
	Completion Date: 2003
	Key Partner: Myrada, Bangalore

<u>Key Words</u>: capacity building, community participation, environment, NGOs, technical studies, transforming institutions, water resources management

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Project Name

Sustainable Drinking Water Supply in the Humid Tropics of Kerala

Location: Kerala

Value: Canadian \$ 1.98 million (Grant)

Contact: Steven Rayfield, Counsellor, Development

Start Date: 1998

Completion Date: 2003

Key Partner: Malanadu Development Society

<u>Key Words</u>: capacity building, community participation, demand assessment, hygiene promotion, NGOs, operation and maintenance, research, transforming institutions, water quality, water resources management

Project Name

Location: Karnataka

Water Resource Development and Energy Conservation for Sustainable Management of the Environment Value: Canadian \$ 2.40 million (Grant)

Contact: Steven Rayfield, Counsellor, Development

Start Date: 1996

Completion Date: 2001

Key Partner: BAIF, Pune

<u>Key Words</u>: capacity building, community participation, demand assessment, environment, environmental health, NGOs, operation and maintenance, poverty, research, technical studies, transforming institutions, water quality, water resources management

Project Name

Integrated Watershed Management and Water Storage in Pushkar Lake, Ajmer District Value: Canadian \$ 1.16 million (Grant)

Contact: Steven Rayfield, Counsellor, Development

Start Date: 1997

Location: Rajasthan

Completion Date: 2000

<u>Key Partner</u>: Directorate of Watershed Development and Conservation, Government of Rajasthan.

<u>Key Words</u>: capacity building, community participation, demand assessment, environment, research, technical studies, transforming institutions, water quality, water resources management

Project Name

Coastal Wetlands Mangrove Conservation and Management Location: East Coast of India

Value: Canadian \$ 3.81 million (Grant)

Contact: Steven Rayfield, Counsellor, Development

Start Date: 1996

Completion Date: 2001

Key Partner: M S Swaminathan Research Foundation

<u>Key Words</u>: capacity building, community participation, environment, environmental health, NGOs, technical studies, transforming institutions, water resources management

Project Name

Location: Manipur

Sustainable Development and Water Resource Management of Loktak Lake Value: Canadian \$ 5.53 million (Grant)

Contact: Steven Rayfield, Counsellor, Development

Start Date: 1998

Completion Date: 2003

Key Partner: Loktak Development Agency, Manipur

<u>Key Words</u>: capacity building, community participation, environment, environmental health, technical studies, transforming institutions, water resources management

<u>Project Name</u>	Location: Orissa
Waste Water Treatment Using Aquaculutre	Value: Rs 7.28 crore (Grant)
	Contact: Steven Rayfield, Counsellor, Development
	Start Date: October 2000
	Completion Date: October 2005
	Key Partner: CENDERET, Bhubaneshwar and CIFA, Bhubaneshwar
	Key Words: capacity building, community participation, demand assessment, environ- ment, hygiene promotion, operation and maintenance, research, technical studies, transforming institutions, water quality, water resources management

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Project Name

Management of Freshwater Resources in the Lakshadweep Islands Value: Rs 6.74 crore (Grant)

Location: Lakshadweep Islands

Contact: Steven Rayfield, Counsellor, Development

Start Date: October 2000

Completion Date: July 2005

Key Partner: Centre for Water Resources Development & Management, Kozhikode - 673 571

<u>Key Words</u>: capacity building, community participation, demand assessment, environment, hygiene promotion, operation and maintenance, research, technical studies, transforming institutions, water quality, water resources management

The Water and Environmental Sanitation Sector in India



Royal Danish Embassy, 11, Aurangzeb Road, New Delhi 110 011 Phone: (011) 301 0900 Fax: (011) 379 2019

Number of water and sanitation professional staff: 65 (35 in Karnataka and 30 in Tamil Nadu)

Key Personnel

JES C BOYE MOLLER, Min. Counsellor of Embassy E-mail: jesboy@delin.um.dk

VIJAY KUMAR, Senior Programme Officer E-mail: vijkum@delin.um.dk

Sector Programme Size: DKK 180 million (Grant Aid)

Project Offices

Project Office 1

(Tamil Nadu) Project Management Group, Danida, 6, Dhandapani Nagar, Cuddalore 607 001 Contact: Lennart Nilson, Chief Adviser Phone: (04142) 330 178, 330 119 Fax: (04142) 330 877 E-mail: wspdan@giasmd01.vsnl.net.in

Project Office 2

(Tamil Nadu) District Task Force (Cuddalore), Danida, DRDA Office Complex, Beach Road, Cuddalore, Tamil Nadu Contact: C Rajathi, DCU-in-Charge, Danida Adviser Phone: (04142) 304 38 Project Office 3 (Tamil Nadu) District Task Force (Villupuram), Danida, The Collectorate, Villupuram, Tamil Nadu Contact: A Devaraj, DCU-in-Charge, Danida Adviser Phone: (04146) 247 03 Fax: (04146) 233 57

Project Office 4 (Karnataka) Project Advisory Group, Danida Contact: Hans Anderskouv, Chief Adviser Claes Clifford, Senior Adviser Water Resources and Water Supply R Kullappa, SeniorAdviser (Social) Phone: (080) 333 1020 Fax: (080) 333 4449 E-mail: danadvic@giasbg01.vsnl.net.jn

Project Office 5

District Co-ordination Unit, Kolar 1st Floor, D.O.R Building, DC Office Compound, Kolar - 563 101 Contact: R Shivappa, DCU-in-Charge, Danida Adviser Phone: (08152) 240 56

Project Office 6

District Co-ordination Unit (Chitradurga), Danida, NGO Building, P D Road, Chitradurga Contact: Sujatha M, DCU-in-Charge, Danida Adviser Phone: (08194) 205 44

Project Office 7

District Co-ordination Unit (Bijapur), Danida, Ashirwad, 118, Viveknagar, Ward No.7, Bijapur - 586 101 Contact: LVR Reddy, DCU-in-Charge, Danida Adviser Phone: (08352) 236 22

Key Priorities/ Future Directions/ Policies

DANIDA Water and Environmental Sanitation Policy

India has been a partner in Danish development assistance programmes for several decades in the health, water and sanitation, agriculture and environmental sectors. The main features of Danish support had been to assist in problem identification and development of innovative solutions. So far, the focus has always been to directly relate to National Sector Policies and to focus, on a broader scale, on long-term capacity development. The support has aimed at introduction of technical and institutional innovations to develop institutional capacity at grassroot levels on a long-term sustainable basis.

The strategy for Danish Development Assistance, as defined in A Developing World Strategy for Development Policy towards the Year 2000 accents the following:

- Promoting women's role in the development process.
- Promoting environmentally sustainable development.
- Promoting democratisation, human rights, and popular participation.

DANIDA: Current Priorities

The current strategy emphasises a sector programme support approach instead of isolated project-based assistance hitherto provided by Danida. Sector programme support will be provided for an established set of policies, strategies, activity programmes and activity component, rather than on specific sector issues demarcated problems. Danida is continuing with the activities that were committed in the pre-1998 scenario and is taking necessary steps, along with the GOI/state governments to institutionalise the new innovative approaches with focus on the following:

Key Document: A Developing World Strategy for Development Policy towards the Year 2000.

- Demand-driven approach entailing user participation right from inception to implementation of a scheme. (Support to democratisation and decentralisation of authority).
- Capital cost sharing.
- Owning up of schemes by users and taking up their O&M through community involvement.

In an endeavour to sustain environment-friendly programmes in the water sector, Danida supports the following:

- Promote appropriate legislative measures for water resources management at central and state level(s).
- Promote no further ground water development in the dark areas.
- Promote sustainable water quality surveillance systems.
- Promote conditions for suitable involvement of women in development of water sector.
- Emphasis on capacity building for multi-disciplinary and multi-dimensional treatment
 of water sector. This implies more 'software' rather than 'hardware' support, for which
 enough capacity and capability exists within government agencies.

Danida supports the following decisions of GOI/state government and wishes to incorporate them in programme formulation:

- Formulation of state level water policy based upon National Water Policy (1987).
- "Water to be managed as a commodity exactly in the same way as any other resource."
- "Supply of water to consumers based upon the principal of effective demand which should broadly correspond to the standard of service that the users are willing to maintain, operate and finance."
- "Local bodies (Panchayat Raj institutions/local administration) should be made responsible for the operation and maintenance of the system installed."
- "Local bodies (Panchayat Raj institutions/local administration) should be free to levy and raise appropriate user charges for drinking water and sanitation services, whereby the services become self sustaining."
- "Appropriate link forged between water supply and environmental sanitation."

With the above common ground between the GOI and Danida sector support policies, Danida aims to integrate its activities in the water sector programmes with those of the government using the existing government machinery. Danida's projects typically have a joint team of state government deputed and Danida-appointed project staff at project management, district co-ordination and field level offices.

No new projects are envisaged in the water and environmental sanitation sector. After the events of 1998, all Danida projects in water sector would be phased out not later than 2008. This would however be done only after making the projects sustainable and the concepts institutionalised.

Projects: Current

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<u>Project Name</u>	Location: Tamil Nadu
Water and Sanitation Project	Value: DKK 77 million (Grant DKK 60 million)
(WASDEP)	Contact: Vijay Kumar, Senior Programme Officer, Danida
	Start Date: October 1996
	Completion Date: March 2004
	Key Partner: Department of Rural Development, Government of Tamil Nadu
	<u>Key Words</u> : capacity building, community participation, cost recovery, hygiene, management of service providers, operation and maintenance, rural sanitation, rural water supply, solid waste management, transforming institutions, water resources management
Project Name	Location: Karnataka
Rural Drinking Water Supply and Sanitation	Value: DKK 103 Million (Grant: DKK 81.9 million)
Project	Contact: Vijay Kumar, Senior Programme Officer, Danida
	Start Date: 1996
	Completion Date: September 2000 (Revision upto March 2002 under consideration)
	<u>Key Partner</u> : Department of Rural Development and Panchayat Raj, Government, Karnataka
	Key Words: capacity building, community participation, cost recovery, health, hygiene, management of service providers, micro financing, operation and maintenance, poverty, rural sanitation, rural water supply, solid waste management, transforming institu-
	tions, water resources management



Danida's Watershed Development Co-ordination Unit

11/1, Sarvapriya Vihar, New Delhi - 110 016 Phone: (011) 686 1904, 686 1905, 652 6384 Fax: (011) 652 6385

Key Personnel

PALLE C ANDERSEN, Programme Co-ordinator E-mail: wdcu@giasdl01.vsnl.net.in

Sector Programme Size: Rs 1079.78 million

Project Offices

Karnataka Watershed Development, Bijapur "Sangamesh" Vivek Nagar (East) Basavanabagawadi Road, Bijapur - 586 101 Phone: (08352) 765 86 Fax: (08352) 770 68 E-mail: danidabj@pn3.vsnl.net.in

Comprehensive Watershed Development Project, Koraput Sambartota, Bell Road, P.O: P R Peta Jeypore – 764 003, Orissa Phone: (06854) 402 96 Fax: (06854) 407 56 E-mail: kewdp@dte.vsnl.net.in

Comprehensive Watershed Development Project, Tirunelveli No.3&4, Apollo Colony, Pothighai Nagar Road, Tirunelveli - 627 007, Tamil Nadu Phone: (0462) 552 617 Fax: (0462) - 552 130 E-mail: datny@md2.vsnl.net.in Comprehensive Watershed Development Project, Ramanathapuram Piot No. 421, Ground Floor, Vth Main Road K.K. Nagar, Madural - 625 020, Tamil Nadu. Phone: (0452) 580 457 Fax: (0452) 580 802 E-mail: danram@md2.vsnl.net.in

Comprehensive Watershed Development Project, Malwa Region, MP 58, Pratap Nagar, Ratlam - 457 001 Madhya Pradesh Phone: (07412) 311 80 Fax: (07412) 420 01 e-mail: danidain@bom4.vsnl.net.in

Key Priorities/ Future Directions/ Policies

- Poverty Reduction
- Gender Equity
- Restoration of Environmental Health

Sustainable Land Use and Cross Route Democracy

Projects: Current

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Project Name

Comprehensive Watershed Development Project, Tirunelveli Location: Tamil Nadu

Value: Value : Rs 417.25 million (Grant)

Contact: Palle C Andersen

Start Date: August 1994

Completion Date: March 2003

Key Partner: Agriculture Engineering Department, Ministry of Agriculture, Govt. of TN

<u>Key Words</u>: Community participation, demand assessment, environment, gender, micro financing, NGOs, poverty, research, technical studies, transforming institutions

Project Name

Comprehensive Watershed Development Project, Ramanathapuram

Location: Tamil Nadu

Value: Rs 140.5 million (Grant)

Contact: Palle C Andersen

Start Date: March 1994

Completion Date: December 2001

<u>Key Partner</u>: Agriculture Engineering Department, Ministry of Agriculture, Govt. of Tamil Nadu

<u>Key Words</u>: Community participation, demand assessment, environment, gender, micro financing, NGOs, poverty, research, technical studies, transforming Institutions

<u>Project Name</u>

Comprehensive Watershed Development Project, Malwa Region, Madhya Pradesh Value: Rs 131.53 million (Grant)

Contact: Palle C Andersen

Location: Madhya Pradesh

Start Date: March 1994

Completion Date: March 2002

Key Partner: Department of Agriculture, Ministry of Agriculture, Govt. of Madhya Pradesh

<u>Key Words</u>: Community participation, demand assessment, environment, gender, micro financing, NGOs, poverty, research, technical studies, transforming institutions

The Water and Environmental Sanitation Sector in India

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DFID (India) Department for International Development

B 28, Tara Crescent, Qutab Institutional Area, New Delhi 110016 Phone: (011) 652 9123 Fax: (011) 652 9296

Key Personnel

RICK WOODHAM, Programme Manager, Madhya Pradesh E-mail: r-woodham@dfid.gov.uk

BEN MELLOR, Programme Manager, Andhra Pradesh E-mail: bj-mellor@dfid.gov.uk

PETER ZOLLER, Programme Manager, Orissa E-mail: p-zoller@dfid.gov.uk

PHILIP ROSE, Programme Manager, National & West Bengal E-mail: p-rose@dfid.gov.uk

NIGEL KIRBY, Engineering Adviser, Convener Water Team E-mail: n-kirby@dfid.gov.uk

Sector Programme Size: UK£ 100 million (Grant) across all sectors

State Representatives

DFIDI Madhya Pradesh British High Commission E-7/642, Arera Colony Near Central Bank, Bhopal 462 016 Contact: Ashim Chowla Phone: (0755) 294 451, 294 452 Fax: (0755) 294 453 E-mail: dfid@satyam.net.in

West Bengal

Madhya Pradesh

DFIDI West Bengal British Deputyy High Commission, 1 Ho Chi Minh Sarani, Calcutta 700 071 Contact: Shumon Sengupta Phone: (033) 288 1266, 2881321 Fax: (033) 288 3435 pmu.calcutta@sm1.sprintrpg.ems.vsnl.net.in Andhra Pradesh DFIDI Andhra Pradesh British High Commission Sarovar Centre Secretariat Road, Hyderabad 500 004 Contact: R S Sharat Phone: (040) 324 2519, 321 0943 Fax: (040) 323 0421 E-mail: dfidi-hyd@dfid.gov.uk

Orissa

DFIDI Orissa, British High Commission A/6 Forest Park, Bhubaneshwar 7510 09 Phone: (0674) 533 359, 530 512 Fax: (0674) 30 228 E-mail: ohpo@dte.vsnl.net.in

Key Priorities/ Future Directions/ Policies

DFID's Key Priorities in India

The British Government White Paper "Eliminating World Poverty: A Challenge for the 21st Century" clearly sets out the main aim of DFID's bilateral aid programme. DFID India's main work involves helping people to find long-term solutions to poverty. The provision of the basic services of water, sanitation, health and education are seen as key elements in the elimination of poverty. DFID India's Country Strategy Paper outlines how DFID prioritise its work in India towards:

- strengthening the capacity of government to develop and implement pro-poor policies; and strengthening the accountability of government to those it represents.
- promoting increased investment in education, health and clean water..
- supporting programmes which help poor people improve their own livelihoods, and which give poor people a bigger say in decisions affecting their lives.
- promoting sustainable management of the earth's resources.

DFID India is concentrating on developing partnerships with states which have large concentrations of poor people and are pursuing pro-poor policies, and is currently focusing on Andhra Pradesh, Madhya Pradesh, West Bengal and Orissa.

Water and Sanitation Strategy

Water and sanitation form an integral part of DFID India's state programmes. Within these state programmes, priorities in water and sanitation focus on the need to:

- recognise water as both a social and an economic good;
- increase support for programmes that bring clean, safe water to poor people in a sustainable manner;
- encourage all those who have an interest in its allocation and use particularly women

 to be involved in decision making and management of water resources; and
- adopt a comprehensive framework that takes account of impacts of water use on all aspects of social and economic development.

The main focus of DFID India's work in water and sanitation is:

- promoting the adoption of a demand-based approach which is participatory and based on offering appropriate technology choices;
- promoting the principles of cost recovery for operation and maintenance, and cost sharing for capital works;
- promoting the importance of improving the quality of both drinking water supply and wastewater discharges;
- working with project partners to increase understanding of the need for integrated water resources management; and
- working with project partners to bring about institutional reform which makes services providers more efficient, more accountable and more responsive.

<u>92</u>

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DFID India recognises that water and sanitation issues cannot be addressed in isolation. DFID India seeks to address these issues through integrated projects, linking water and sanitation with health, education, sustainable livelihoods and urban poverty.

The strategy is implemented through a combination of projects in partnership with state governments, support to multilateral agencies, training and research. Increasingly DFID India aims to work with state governments to agree support to an overall framework for addressing poverty. DFID India maintains dialogue with the Government of India and state governments, and aims to contribute effectively to their policy.

DFID India seeks to collaborate with other donors, including the World Bank and the Asian Development Bank. DFID India also provides support to multilaterals, including the United Nation's Children's Fund and the Water and Sanitation Program - South Asia, private and NGO initiatives, where there are shared interests and a potential exists for greater impact.

DFID India recognises the importance of training and capacity building in water and environmental sanitation, and supports both sector wide and project specific human resource development.

DFID's Knowledge and Research (KAR) programme supports important research in water and environmental sanitation, and makes efforts to disseminate the results and findings as widely as possible.

Projects: Current

Location: National

Project Name

Urban Environmental Sanitation and Water for India: Capacity Building for National and Municipal Decision Makers Value: UK£ 0.8 million (Grant)

<u>Contact</u>: Sriparna lyer, Programme Officer Nigel Kirby, Engineering Adviser

Start Date: 1998

Completion Date: 2001

Key Partner: Water and Sanitation Program - South Asia

<u>Key Words</u>: urban sanitation, urban water supply, transforming institutions, capacity building

Project Name

UNICEF Control of Diarrhoeal Diseases CDD-WATSAN Project Location: Orissa & W.Bengal

Value: UK£ 4.9 million (Grant)

<u>Contact</u>: Jaya Singh Verma, Programme Officer Nigel Kirby, Engineering Adviser

Start Date: April 1996

Completion Date: November 2000

Kev Partner: UNICEF, Government of Orissa, Government of West Bengal

Key Words: rural sanitation, rural water supply, community participation, hygiene promotion

Project Name

UNICEF/Government of India Child's Environment: Hygiene, Sanitation and Water Supply Programme Value: UK£ 17 million (Grant)

Location: National

<u>Contact</u>: Jaya Singh Verma, Programme Officer Nigel Kirby, Engineering Adviser

Start Date: January 1999

Completion Date: December 2003

Key Partner: UNICEF, Government of India

Key Words: rural sanitation, rural water supply, hygiene promotion, NGOs, urban sanitation, urban water supply

Project Name

Management Development for Senior Urban Public Health Officials

94

Location: National

Value: UK£ 1.6 million (Grant)

<u>Contact</u>: Sriparna Iyer, Programme Officer Nigel Kirby, Engineering Adviser

Start Date: 1993

Completion Date: 2004

Key Partner: Ministry of Urban Affairs and Employment, WEDC, Administrative Staff College of India

<u>Key Words</u>: urban sanitation, urban water supply, transforming institutions, capacity building

<u>Project Name</u>	Location: National
Translating RWSS Policy Reforms into Reality: A Strategy for Change	Value: UK£ 1.4 million (Grant)
	<u>Contact</u> : Sriparna Iyer, Programme Officer Nigel Kirby, Engineering Adviser
	Start Date: August 1998
	Completion Date: March 2001
	<u>Key Partner</u> : Development Support Centre, 2 Praktruti Apts, HL Commerce College Road, Navrangpura, Ahmedabad - 380 009
	Key Words: Rural, irrigation, management, NGO, participation
Project Name	Location: Cuttack, Orissa
Cuttack Urban Services	Value: UK£ 12.72 million (Grant)
Improvement Project	<u>Contact:</u> Taruna Sharma, Project Officer Simon Kenny, Engineering Adviser
	Start Date: April 1998
	Completion Date: March 2002
	<u>Key Partner</u> : Ministry of Housing and Urban Development, Bhubaneswar, Cuttack Municipal Corporation
	<u>Key Words</u> : urban sanitation, urban water supply, solid waste management, transforming institutions, capacity building, operation and maintenance
<u>Project Name</u>	Location: Kerala
Cochin Urban Poverty	Value: UK£ 11.95 million (Grant)
Reduction Project	<u>Contact</u> : Gopi Menon, Project Officer Simon Kenny, Engineering Adviser
	Start Date: April 1998
	Completion Date: December 2001
	Key Partner: Water and Sanitation Program - South Asia
	Key Words: urban sanitation, urban water supply, solid waste management, transform- ing institutions, capacity building, operation and maintenance, poverty

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Project Name	Location: Andhra Pradesh
Andhra Pradesh Urban Services for the Poor	Value: UK£ 95 million (Grant)
	Contact: Gopi Menon, Project Officer
	Simon Kenny, Engineering Adviser
	Start Date: September 2000
	Completion Date: 2007
	Key Partner: Government of Andhra Pradesh
	Key Words: urban sanitation, urban water supply, solid waste management,
	transforming institutions, capacity building, operation and maintenance, poverty
<u>Project Name</u>	Location: Andhra Pradesh
Andhra Pradesh	Value: UK£ 45.5 million (Grant)
Rural Livelihoods Project	Contact: Moustushi Sengupta, Project Officer
	Simon Croxton, Rural Livelihoods Adviser
	Start Date: 1999
	Completion Date: 2006
	<u>Key Partner</u> : Department of Rural Development and Panchayati Raj, Government of Andhra Pradesh
	Key Words: water resources management, transforming institutions, community
	participation, policy reform, poverty
<u>Project Name</u>	Location: Karnataka
Karnataka Watershed Development Project	Value: UK£ 15.2 million (Grant)
	Contact: B. Siddarthan, Project Officer
	Simon Croxton, Rural Livelihoods Adviser
	Start Date: 1998
	Completion Date: 2002
	Key Partner: Department of Watershed Development, Government of Karnataka
	Key Words: water resources management, transforming institutions, community participation, policy reform

<u>Project Name</u>

Western India Rainfed Farming Project Value: UK£ 23.21 million (Grant)

Contact: Lakshmi Menon, Project Officer Kevin Crockford, Rural Livelihoods Adviser

Location: Madhya Pradesh, Rajasthan, Gujurat

Start Date: 1999

Completion Date: 2006

Key Partner: Government of India, GVT and IFFDC

<u>Key Words</u>: water resources management, community participation, policy reform, poverty

<u>Project Name</u>	Location: West Bengal, Orissa, Bihar
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Eastern India Rainfed Farming Project Value: UK£ 9 million (Grant)

<u>Contact:</u> Jeena Abraham, Project Officer, Peter Reid, Rural Livelihoods Adviser

Start Date: 1995

Completion Date: 2003

Key Partner: Government of India/GVT

Key Words: water resources management, community participation, policy reform, poverty

Project Name Location: Orissa

Western Orissa Rural Livelihoods project Value: UK£ 32.75 million (Grant)

<u>Contact</u>: Shiromani Singh, Project Officer Peter Reid, Rural Livelihoods Adviser

Start Date: 1999

Completion Date: 2009

Key Partner: Department of Agriculture (Gol), Ministry of Rural Development (Gol)

Key Words: water resources management, community participation, policy reform, poverty

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Projects: Proposed

<u>Project Name</u>

Location: West Bengal

Value: UK£ 50-70 million (Grant)

Calcutta Urban Services for the Poor

Contact: Sriparna Iyer, Project Officer Simon Kenny, Engineering Adviser

Start Date: 2001

Completion Date: 2006-2008

Key Partner: Calcutta Metropolitan Development Authority

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<u>Key Words</u>: urban sanitation, urban water supply, solid waste management, transforming institutions, capacity building, operation and maintenance

Project Name

Location: National

Human Resource Development for the Water and Sanitation Sector

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Value: UK£ 4 million (Grant)

<u>Contact:</u> Sriparna lyer, Project Officer Nigel Kirby, Engineering Adviser

Start Date: 2001

Completion Date: 2006

<u>Key Partner</u>: Rajiv Gandhi National Drinking Water Mission, Ministry of Urban Development

Key Words: rural sanitation, rural water supply, urban sanitation, urban water

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<u>Project Name</u>	Location: Andhra Pradesh
Neeru Vibhagamu Samaskarnalu - Building	Value: UK£ 3 million (Grant)
Commitment To Water Sector Reform In Andhra Pradesh	<u>Contact</u> : Aditi Rajyalaxmi, Project Officer Nigel Kirby, Engineering Adviser
	Start Date: 2001
	Completion Date: 2004
	<u>Key Partner</u> : Panchayati Raj and Rural Development Department, Municipal Administration and Urban Development
	<u>Key Words</u> : rural sanitation, rural water supply, urban sanitation, urban water supply, solid waste management, transforming institutions, capacity building, operation and maintenance
Project Name	Location: Madhya Pradesh
Livelihoods Security Mission	Value: UK£ 100 million (Grant)
	<u>Contact</u> : Lakshmi Menon, Project Officer Kevin Crockford, Rural Livelihoods Adviser
	Start Date: 2001- tentative
	Completion Date: 2008
	Key Partner: Tribal Welfare Department (GoMP)
	Key Words: water resources management, transforming institutions, community participa- tion, policy reform, poverty
<u>Project Name</u>	Location: Madhya Pradesh
Healthy Lives Mission	Value: UK£ 50 million (Grant)
	<u>Contact</u> : Sandeepa Sahay, Project Officer Tim Martineau, Health Adviser
	Start Date: 2001-tentative
	Completion Date: 2006
	Key Partner: Rajiv Gandhi Mission for Community Health, Health Department
	Key Words: rural sanitation, urban sanitation, water resources management, transforming institutions, hygiene promotion, health

The Water and Environmental Sanitation Sector in India

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EUROPEAN UNION Delegation of the European Commission

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Key Personnel

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Sector Programme Size: Million Euros 1842,630,000 (Total Project costs) Million Euros 670,000,000 (EC Contribution) - Grant

EC Water and Environmental Sanitation Policy

The EC's development cooperation programme with India focusses on alleviation of poverty through the provisions of fundamental needs of (1) Education, (2) Health, (3) Improved access to productive resources and (4) Environment. All these four priority areas are in some way or the other related to water and environmental sanitation issues.

However, EC's direct involvement in water and environmental sanitation sector policy and implementation has so far been limited. Development cooperation projects have not been specifically targeted at this sector, with the exception of NGO projects funded through certain financing instruments like the NGO Co-financing and the Environmental Budget Lines.

101 _____

The future development cooperation with India has identified sector programmes in support of policy reform as its major instrument. This sector programme approach addresses the existing need to support the process of social development as a parallel objective to economic development by focusing resources on improving sector performance and structural reforms in key sectors. At the same time, sector programmes involve a close collaboration and coordination with other major donors as the EU Member States, the World Bank, etc allowing a major impact of donors' support.

The first sector programme undertaken was the Primary Education Support Programme with an EC financial commitment of 150 million Euro cofinanced by the World Bank and DFID. A second was launched, the Health and Family Welfare Sector Support Development Programme with an EC financial commitment of 200 million Euro. The overall development objective is to improve the quality and accessibility of health services with particular focus on women's and child health status. This programme was also assisted by the World Bank, DFID, UNICEF, UNFPA and other small contributions.

This orientation will be reinforced with the perspective of concentrating resources in a new sector programme in the area of environment. Taking into consideration the accelerated industrial and urban growth in India and the aggravation of the already serious problems of degrading water, soil, forest and coastal resources, during the next five years an EC-India Environment Sector Programme is envisaged with three main components:

- a) Raising public and government awareness of environmental issues
- b) Launching an integrated area-based Environment Management Programme in a selected State, including components such as pollution prevention, urban planning, costeffective environmental monitoring, feasibility studies.and preparation of environmental infrastructure investment projects, etc.
- c) Supporting the creation of an Environment Resource Centre for India, which would (1) provide resources for the training of officials, planners, operators and monitors; (2) assist municipal authorities with the development of a local "Agenda 21"; and (3) establish a network for promoting and marketing cleaner technologies on commercial basis.

In addition to the possible sector programme on environment, development cooperation of the European Commission in India will continue to support small-scale projects in the water and sanitation sector implemented by NGOs due to their skills in accessing and organising the most deprived sections of the population, their efficiency and effectiveness and their increased role in the social and economic development of the country.

Finally, EU-India Summit held in June 2000 declared deep concern about growing environmental degradation and the consequent need to pursue enhanced multilateral co-operation in addressing the twin challenges of protecting the environment and promoting sustainable development. It was agreed to institute a joint working group on environment to promote joint collaborative projects, facilitate transfer of technologies, develop opportunities for investments in the public and private sectors, launch an environmental awareness programme and facilitate co-ordination on multilateral environmental issues. The Agenda for Action specifically included these aspects in two-fold, joint efforts towards establishing an Institute of Environment Technology in India and active promotion of bilateral initiatives in the environment sector.

Projects: Current

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<u>Project Name</u>	Location: Delhi, U.P, Kerala, Tamil Nadu
B7-5040/95/013 - LOMWATS	Value: Euros 1,145,132 (Total Proj Cost) - Grant: Euros 775,000 (EC Contribution)
(Low Maintenance Waste Water Treatment Systems)	<u>Contact</u> : Natalia Alonso.
	Start Date: 25 October 1994
	Completion Date: 24 April 1998 (project under consideration for further extension)
	<u>Key Partner:</u> BORDA (Germany) , SIITRAT (N.Delhi), SCR (Auroville, TN) and MDS (Kanjirapalli, Kerala)
	Key Words: community participation, hygiene promotion, NGOs, solid waste manage- ment, urban sanitation
Project Name	Location: New Delhi
IND/B7-6200/99-0341/DEV/ENV - Policy Research and Awareness Creation in the Field of Environmental Health Interface	Value: Euros 962,300 (Total Proj. Cost) - Grant: Euros 732,765 (EC Contribution)
	Contact: Natalia Alonso
and Development of an Alternative Pollution Monitoring Control System	Start Date: 1st January 2000
Politikon Monitoning Control System	Completion Date: 31st December 2002
	Key Partner: CSE (Centre for Science and Environment)
	Key Words: environmental health, NGOs, policy reform, research
Project Name	Location: Orissa
B7-6000/99/334/FR - Construction of	Value: Euros 81,456 (Total Project Cost) - Grant: Euros 43,203 (EC Contribution)
a Pipeline System for Water Supply for the Refugee Tibetan Camp of Puntosokling, Orissa	Contact: Mariam Homayoun
	Start Date: 21st December 1999
	Completion Date: 20th july 2000
	Key Partner: Assistance Medicale Tout du Monde and Central Tibetan Administration

Key Words: NGOs, operation and maintenance, rural sanitation, rural water supply

Project Name

B7-6000/99/359/UK - Community led Urban Infrastructure Project

Value: Euros 249,115 (Tot. Proj. Cost) - Grant: Euros 89,452 (EC Contribution)

Contact: Jose-Felix Merladet

Location: Maharashtra, Uttar Pradesh

Start Date: 30th November 1999

Completion Date: 29th November 2002

Key Partner: Homeless International and SPARC

Key Words: NGOs, solid waste management, urban sanitation, urban water supply

Value: Euros 1,249,485 (Total proj. cost) - Grant: Euros 450,000 (EC Contribution)

Project Name

Location: Andhra Pradesh, Karnataka, Maharashtra, Orissa

B7-6000/98/156/UK - Developing Model Approaches to Community Managed Water and Sanitation Projects in Southern India

Contact: Jose-Felix Merladet

Start Date: 24th November 1998

Completion Date: 23rd November 2001

Key Partner: WaterAid

Key Words: hygiene promotion, NGOs, rural water sanitation, rural water supply



Embassy of France Economics, Trade and Finance Commission

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Key Personnel

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OLDENBURG MICHEL, Commercial Attache E-mail: michel.oldenburg@dree.org

Sector Programme Size: 430 million FF (Soft Loan)

Projects: Current

Project Name

Location: Delhi

Setting up of a Water Treatment Plant

Value: 45 million FF (Soft Loan)

Contact: Barbaret Herve

Start Date: 1996

Kev Partner: Delhi Jal Board

Key Words: demand assessment, health, operation and maintenance, urban water supply, water quality

Project Name

Location: Rajasthan

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Master Plan, leakage Study, Ground Water Recharge Study

Value: 30 million FF

Contact: Barbaret Herve

Start Date: 1996

Key Partner: Public Health Engineering Department, Jaipur

Key Words: urban water supply, water quality

Project Name

Setting up of a Water Treatment Plant + GIS Location: Karnataka

Value: 50 million FF

Contact: Barbaret Herve

Start Date: 1998

Key Partner: Bangalore Water Supply

Key Words: demand assessment, health, operation and maintenance, urban water supply, research, technical studies, water quality

Project Name

Location: Gujarat

Setting up of a Dam Fusegates

Value: 34 million FF

Contact: Barbaret Herve

Start Date: 1999

Key Partner: Government of Gujarat

<u>Key Words</u>: demand assessment, operation and maintenance, research, technical studies, water resources management

Project Name	Location: Andhra Pradesh
Improvement of Water Supply and Network Rehabilitation	Value: 98 Million FF
	Contact: Barbaret Herve
	Start Date: Not yet started
	Key Partner: Visakhapatnam Municipal Corporation
	Key Words: demand assessment, health, operation and maintenance, urban water supply, research, technical studies, water quality

<u>Project Name</u>	Location: Manipur
Setting up of a Water Treatment Plant	Value: 31.7 Million FF
	Contact: Barbaret Herve
	Start Date: 1999
	Completion Date: July 2005
	Key Partner: Public Health Engineering Department, Manipur
	<u>Key Words</u> : demand assessment, health, operation and maintenance, urban water supply, research, technical studies, water quality
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<u>Project Name</u>	Location: Manipur
<u>Project Name</u> Groundwater Study	<u>Location</u> : Manipur <u>Value</u> : 4.5 Million FF
	Value: 4.5 Million FF
	<u>Value</u> : 4.5 Million FF <u>Contact</u> : Barbaret Herve

<u>Project Name</u>	Location: West Bengal
Pilot Project for Rehabilitation and	Value: 36 Million FF
Improvement of Calcutta Network	Contact: Barbaret Herve
	Start Date: 1999
	Key Partner: Calcutta Municipal Corporation
	Key Words: demand assessment, health, operation and maintenance, policy reform,
	urban water supply, research, technical studies, water quality
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Project Name	Location: West Bengal/Orissa
Feasabílity Study for Solid Waste	Value: 3.3 Million FF
Management in Calcutta and Bhubaneshwar	Contact: Barbaret Herve
	Start Date: 1999
	Completion Date: 2000
	Key Partner: Calcutta Municipal Corporation, Bhubaneshwar Municipal Corporation
	Key Words: health, operation and maintenance, solid waste management, urban water supply, research, technical studies, water quality

Projects: Proposed

Project Name

Sewerage Treatment Plant in Manipur

Value: 58 Million FF

Location: Manipur

Contact: Barbaret Herve

Start Date: 2001

Key Partner: Public Health Engineering Department, Manipur

<u>Key Words</u>: environmental health, operation and maintenance, solid waste management, urban water supply, technical studies, urban sanitation

<u>Project Name</u>	Location: Maharashtra
Dynamic Regulation of Canals	Value: 34 Million FF
	Contact: Barbaret Herve
	Start Date: 2001
	Key Partner: Public Health Engineering Department, Manipur
	<u>Key Words</u> : capacity building, demand assessment, management of service providers, operation and maintenance, rural water supply, technical studies, transforming institutions,water resources management

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The Water and Environmental Sanitation Sector in India

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Food & Agriculture Organisation of the United Nations

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Key Personnel

PETER ROSENEGGER, FAO Representative E-mail: fao-ind@field.fao.org

GOPI GHOSH, National Proff. Officer E-mail: fao-ind@field.fao.org

Sector Programme Size: Rs 15-18 Crores (Grant)

Key Priorities/ Future Directions/ Policies

Today, FAO is the largest specialised agency in the United Nations system and the lead agency for agriculture, forestry, fisheries, and rural development. An intergovernmental organization, FAO has 180 member countries plus a member organization, the European Community.

Since its inception, FAO has worked to alleviate poverty and hunger by promoting agricultural development, improved nutrition and the pursuit of food security – defined as the access of all people at all times to the food they need for an active and healthy life.

A specific priority of the Organization is encouraging sustainable agriculture and rural development, a long-term strategy for increasing food production and food security while conserving and managing natural resources.

Development assistance

FAO gives practical help to developing countries through a wide range of technical assistance projects. The Organization encourages an integrated approach, with environmental, social and economic considerations included in the formulation of development projects.

Information

FAO collects, analyses, interprets and disseminates information relating to nutrition, food, agriculture, forestry and fisheries. The organization serves as a clearing-house, providing farmers, scientists, government planners, traders and non-governmental organizations with the information they need to make rational decisions on planning, investment, marketing, research and training.

FAO promotes sustainable water management through water harvesting and use of simple pumps. Results from the Sahel region show that rain harvested from one hectare to irrigate another hectare can triple or even quadruple production.

Projects: Completed

Project Name

Participatory Water Sector Management Training in Asia Location: Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, Sri Lanka, Thailand, Pakistan

Value: US\$ 1,756,427

Contact: Prem Sharma, Chief Technical Advisor, Kathmandu

Start Date: 1995

Completion Date: 1999

Key Partner: Food & Agriculture Organization/United Nations

<u>Kev Words</u>: community participation, environment, NGOs, policy reform, poverty, research, technical studies, water resources management

Projects: Proposed

Integrated Watershed Management Project in Rajasthan



The Ford Foundation

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Key Personnel

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RADHIKA JOHARI, Program Associate, Water Resources Management and Policy E-mail: r.johari@fordfound.org

SAVITA SINHA, Secretary, Water Resources Management and Policy E-mail: s.sinha@fordfound.org

Sector Programme Size: Estimated to be \$ 2,500,000 for FY 2000/2001 (Grant Aid)

Key Priorities/ Future Directions/ Policies

Objectives

Water resources management in South Asia is plagued by increasingly competitive demands on water against a background of growing scarcity, inadequate supplies and unequal access and control over water resources, particularly for the extreme poor for whom water is a vital asset for securing income and livelihood needs. To address these concerns, the Water Resources Management and Policy Portfolio of the Ford Foundation's New Delhi office supports the emergence of water resource systems that are equitable, sustainable, just and productive. Specifically, it seeks to enhance and sustain the role and voice of local communities in the development, management and control of small-scale water resources as collective assets in India and Nepal. The portfolio aims to enhance not only the institutional and policy environment for local control and access, but also to support innovative ideas and practices emerging from the grassroots that foster collective action at the community level for the sustainable and equitable management and use of natural resources.

Program Strategy An integrated approach has involved fostering institutional capacities, supporting collective action, and linking research with networking, advocacy and policy. Important portfolio thrusts include:

- Redressing the current sectoral, disciplinary and gender biases that mark present water resources management;
- Creating a legal and institutional framework that guarantees access and rights to water for the poor and marginalized; and
- Supporting communities in their struggle to gain control over water resource systems and to convert them into assets that secure livelihoods and promote natural resource conservation.

Future Directions

Ins The New Delhi office will continue to extend support to research centers, government agencies and non-government organizations for a variety of integrated and complementary efforts. These include:

- · Capacity-building for action-oriented research, documentation and analysis
- Process documentation and participatory rural appraisals;
- Establishment and consolidation of networks of practitioners, policy-makers and researchers;
- · Strengthening community organizations and federations of water user groups; and
- Enhancing local leadership and governance capacities for water resources management.

Projects: Current

<u>Project Name</u>

Location: Himalayas (India and Nepal)

Support for an Action and Research Project on the Development of Equitable and Sustainable Community-managed Water Resources in the Himalayas

Value: US\$ 150,000 (Grant)

Contact: Ujjwal Pradhan, Programme Offier

Start Date: July, 1999

Completion Date: June, 2001

Key Partner: International Development Enterprises (India and Nepal offices)

<u>Key Words</u>: community participation, research, transforming institutions, capacitybuilding, rural water supply, technical studies, private sector participation, water resources management

Project Name

Support for Scaling up Participatory Tank Management and Enhancing the South India Tank Network Location: Tamil Nadu

Value: US\$ 49,651 (Grant)

Contact: Ujjwal Pradhan, Programme Offier

Start Date: August, 2000

Completion Date: August, 2001

Key Partner: DHAN (Development of Humane Action) Foundation

<u>Key Words</u>: community participation, research, gender, NGOs, transforming institutions, capacity-building, management of service providers, technical studies, policy reform, rural water supply, water resources management

Project Name Lo

Support for Research on the Implications of Participatory Irrigation Management Policy on Water Resource System Performance and the Functioning of Water Users Associations in Andhra Pradesh Location: Andhra Pradesh

Value: US\$ 79,884 (Grant)

Contact: Ujjwal Pradhan, Programme Offier

Start Date: April, 2000

Completion Date: April, 2003

Key Partner: Institute of Resource Development and Social Management

<u>Key Words</u>: community participation, research, transforming Institutions, capacitybuilding, NGOs, policy reform, rural water supply, water resources management

Project Name

Support for the Development of a Public Interest Environmental Quality Monitoring Center

Value: US\$ 150,000 (Grant)

Location: National

Contact: Ujjwal Pradhan, Programme Offier

Start Date: June, 2000

Completion Date: June, 2003

Key Partner: People's Science Institute

<u>Key Words</u>: community participation, research, capacity-building, technical studies, environmental health, environment, policy reform, NGOs, water quality, water resources management

<u>Project Name</u>	Location: Gujarat
Support for Research to Promote Gender Equity in Water Resources Management	: <u>Value</u> : US\$ 50,609 (Grant)
	Contact: Ujjwal Pradhan, Programme Offier
	<u>Start Date</u> : April, 2000
	Completion Date: April, 2002
	Kev Partner: Utthan Development Action Planning Team
	<u>Key Words</u> : community participation, gender, research, capacity building, NGOs, rural water supply, water resources management
<u>Project Name</u>	Location: Gujarat
Support for Innovative Initiatives,	Value: US\$ 75,000 (Grant)
Capacity-building and Information Dissemination on Participatory	Contact: Ujjwal Pradhan, Programme Offier
Irrigation Management in Gujarat	Start Date: June, 2000
	Completion Date: May, 2003
	Key Partner: Aga Khan Rural Support Programme
	Key Words: community participation, gender, research, capacity building,
	policy reform, NGOs, rural water supply, water resources management
Project Name	Location: Tamil Nadu
Support for Research on the Linkages between Panchayati Raj and Tank Irriga- tion Management in Tamil Nadu	<u>Value</u> : US\$ 48,000 (Grant)
	Contact: Ujjwal Pradhan, Programme Offler
	Start Date: May 2000
	Completion Date: May 2002
	Key Partner: Tamil Nadu Agricultural University
	Key Words: community participation, research, transforming institutions,

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policy reform, rural water supply, water resources management

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<u>Project Name</u>	Location: Rajasthan
Support for a People's Movement for the	<u>Value</u> : US\$ 75,000 (Grant)
Integrated Management of Water Resources Through Institutional	Contact: Ujjwal Pradhan, Programme Offier
Capacity-building in Rajasthan	Start Date: August, 2000
	Completion Date: February, 2002
	Key Partner: Tarun Bharat Sangh
	<u>Key Words:</u> community participation, research, NGOs, transforming institutions, capacity-building, policy reform, rural water supply, water resources management, poverty

The Water and Environmental Sanitation Sector in India

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GTZ India

Deutsche Gesellschaft Fuer Technische Zusamenarbeit GmbH (German Agency for Technical Co-operation)

21 Jor Bagh, New Delhi -110 003

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Key Personnel

DR GISELA HAYFA, Director E-mail: hayfa@gtzindia.com

ANANDI IYER, Deputy Director E-mail: anandi@gtzindia.com

Sector Programme Size: Approx. DM 47 million (Grant)

Key Priorities/ Future Directions/ Policies

GTZ's technical assistance in this sector is based on the German Government's bilateral aid programme with India. Poverty alleviation is the main thrust area and projects should be concentrated in six to seven reform-oriented states. Improvement of watershed management, minor irrigation, rural water supply, primary health care, rural development and slum improvement are important elements in alleviating poverty and are being assisted by German technical co-operation in India.

Watershed management has a direct impact on poverty reduction by improving drinking water supply, improving the productivity of natural resources and hence satisfying basic needs and generates more income Considering the desertification and degradation of natural resources due to climatic conditions and over-utilisation, a sustainable and participatory management of watershed is considered as a viable solution.

An adequate supply of safe drinking water is one of the most basic needs. Almost half of the population of developing countries has neither the quantity nor the quality of water needed, and even fewer people have access to suitable disposal facilities for sewage. The dangers of unsafe drinking water and poor sanitary facilities often lead to insupportable living conditions, especially in densely populated areas.

A safe supply of drinking water and adequate sanitation in rural and urban areas has a high priority with GTZ. Since local users should share some of the cost, low-cost technology is important for target group acceptance. In some cases users readily accept responsibility for the operation and maintenance of the plants. Maximum integration of operators and target groups in the individual stages of planning and implementation is the key for sustainable results.

Projects:	Current
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<u>Project Name</u>	Location: Himachal Pradesh
Indo- German Changar	Value: DM 16 Million (Grant)
Eco-Development Project	Contact: Dr Silvio Decurtins
	Start Date: November 1993
	<u>Completion Date</u> : December 2004
	Key Partner: Ministry of Environment and Forests, Government of India, Himachai Pradesh Eco- Development Society
	Key Words: capacity building, community participation, environmental health, poverty, research, transforming institutions
Project Name	Location: Delhi. National
Indo- German Bilateral Project	Value: DM 18 Million (Grant)
'Watershed Management'	Contact: Guy Honore
	Start Date: November 1989
	Completion Date: June 2002
	Key Partner: Ministry of Agriculture, Government of India
	Key Words: community participation, environment, NGOs, technical studies, trans- forming institutions, water resources management
Project Name	Location: Maharashtra
Slum Improvement Project Nagpur	Value: DM 3.8 million (Grant)
	Contact: Ulf Wernicke
	Start Date: January 1997
	Completion Date: June 2003
	Key Partner: Ministry of Urban Affairs, Nagpur Municipal Corporation
	Key Words: community participation, health, hygiene promotion, NGOs, poverty, solid waste management, urban sanitation, urban water supply

Project Name

Indo-German Promotion of Watershed Self Help Program Location: Maharashtra

Value: DM3.3 Million (Grant)

Contact: Father Crispino Lobo

Start Date: April 1996

Completion Date: December 2003

Key Partner: Ministry of Agriculture , Government of Maharashtra

<u>Key Words</u>: community participation, environment, NGOs, technical studies, transforming institutions, water resources management

Projects: Proposed

Project Name

Soil Conservation and Watershed Management Training Location: Maharashtra

Value: yet to be decided

Contact: Anandi Iyer

Start Date: Expected 2001

Key Partner: Ministry of Agriculture

<u>Key Words</u>: community participation, environment, NGOs, technical studies, transforming institutions, water resources management

Project Name

Location: Himachal Pradesh

Minor Irrigation and Rural Drinking Water Supply Value: Approx. DM 6 Million (Grant)

Contact: Anandi Iyer

Start Date: expected in year 2000

Key Partner: Ministry of Agriculture

<u>Key Words</u>: community participation, demand assessment, health, hygiene promotion, operation and maintenance, rural sanitation, rural water supply, water quality, water resources management

The Water and Environmental Sanitation Sector in India

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122

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Japan Bank for International Co-operation

3rd Floor, DLF Centre, Sansad Marg, New Delhi – 110 001 Phone: (011) 371 4362, 371 4363, 371 7090, 335 6200 Fax: (011) 371 5066

Key Personnel

KAZUTO TSUJI, Chief Representative E-mail: k-tsuji@jbic.go.jp

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M P SINGH, Senior Project Officer E-mail: mp-singh@jbic.go.jp

VINEET S SARIN, Project Officer E-mail: v-sarin@jbic.go.jp

P RAJASEKHARAN, Project Officer E-mail: p-rajasekharan@jbic.go.jp

Sector Programme Size: JPY 107,470 million (Loan)

Key Priorities/ Future Directions/ Policies

Japan Bank for International Co-operation (JBIC), which was established in October 1999 through the merger of the Export - Import Bank of Japan (JEXIM) and the Overseas Economic Co-operation Fund, Japan (OECF), is a Japanese governmental funding agency for the economic and social development. As the largest bilateral donor for India, JBIC has been continuously expanding its operations in volume, recipient countries, target sectors, and quality.

Focusing more on environmental issues along with poverty and economic growth, JBIC is assisting many projects in the field of water supply, sanitation, water resource management, forestry, and pollution control. Especially for these projects, JBIC realizes that active participation of the beneficiaries and the communities is the most essential element for the sustainable implementation, operation, maintenance, monitoring, and evaluation. With this understanding, JBIC tries to contribute to more sustainable and pro-poor development of India.

JBIC assisted projects

<u>Project Name</u>	Location: Delhi, Haryana and Uttar Pradesh
Yamuna Action Plan Project	Value: JY 17,773 million (Loan)
	Contact: P Rajasekharan
	Start Date: December 21, 1992
	Completion Date: April 19, 2002
	Key Partner: National River Conservation Directorate (NRCD)
	<u>Key Words</u> : Community participation, cost recovery, environment, environmental health, hygiene promotion, NGOs, operation and maintenance, poverty, urban sanitation, water quality
Project Name	Location: Madhya Pradesh
Lake Bhopal Conservation and Management Project	<u>Value</u> : JY 7,055 million (Loan)
	<u>Contact</u> : E Natarajan
	Start Date: February 28, 1995
·	Completion Date: April 12, 2002
	Key Partner: 1) Environmental Protection & Conservation Organization, Bhopal 2) Housing and Environment Department, Govt. of Madhya Pradesh
	Key Words: Environment, environmental health, hygiene promotion, poverty, urban sanitation, water quality
Project Name	Location: West Bengal
Industrial Pollution Control Project	Value: JY 1,525 million (Loan)
	Contact: Vineet S Sarin
	Start Date: February 28, 1995
	Completion Date: April 12, 2001
	Key Partner: West Bengal Pollution Control Board, Calcutta
	<u>Key Words</u> : Environment, research, technical studies, transforming institutions, water quality

<u>Project Name</u>	Location: National
Industrial Pollution Control Program	<u>Value</u> : JY 3,000 million (Loan)
	Contact: P Rajasekharan
	Start Date: February 28, 1995
	Completion Date: October 02, 2002
	Key Partner: Industrial and Investment Corporation of India Limited, Mumbai
	Key Words: Environment, private sector participation

Project Name	Location: Kerala
Attappady Wasteland Comprehensive Environmental Conservation Project	<u>Value</u> : JY 5,112 million (Loan)
	Contact: M P Singh
	<u>Start Date</u> : January 25, 1996
	Completion Date: March 26, 2005
	Key Partner: Attapady Hills Area Development Society / Local Self Govt. of Kerala
	Key Words: Environment, private sector participation
<u>Project Name</u>	Location: Chennai, Tamil Nadu
Chennai Sewerage Renovation and Functional Improvement Project	<u>Value</u> : JY 17,098 million (Loan)
	Contact: M P Singh
	Start Date: February 28, 1995
	Completion Date: April 12, 2001
	Key Partner: Chennai Metropolitan Water Supply and Sewerage Board, Chennai
	<u>Key Words</u> : Cost recovery, environment, environmental health, management of service providers, operation and maintenance, poverty, urban sanitation, water quality, water resources management

<u>Project Name</u>	Location: Karnataka
Bangalore Water Supply and Sewerage Project	Value: JY 28,452 million (Loan)
Sewelage Flojeci	Contact: M P Singh
	Start Date: January 25, 1996
	Completion Date: March 26, 2004
	Key Partner: Bangalore Water Supply and Sewerage Board, Bangalore
	Key Words: cost recovery, environment, environmental health, operation and maintenance, poverty, urban sanitation, urban water supply, water quality
<u>Project Name</u>	Location: National
Urban Water Supply and Sanitation	<u>Value</u> : JY 8,670 million (Loan)
Improvement Program	Contact: M P Singh
	Start Date: January 25, 1996
	Completion Date: June 28, 2004
	Key Partner: Housing and Urban Development Corporation Ltd.
	Key Words: cost recovery, environment, environmental health, operation and maintenance, poverty, urban sanitation, urban water supply, water quality
<u>Project Name</u>	Location: Kerala
Kerala Water Supply Project	Value: JY 11,997 million (Loan)
	Contact: M P Singh
	Start Date: January 25, 1996
	Completion Date: June 03, 2006
	Kev Partner: Kerala Water Authority, Thiruvananthapuram
	<u>Key Words</u> : cost recovery, environment, environmental health, operation and maintenance, rural water supply, urban water supply, water quality

Projects: Completed

<u>Project Name</u>

Urban City Water Supply Project

Value: JY 6,788 million (Loan)

Location: Maharashtra

Contact: M P Singh

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Start Date: January 9, 1992

Completion Date: March 31, 2000

Key Partner: Housing and Urban Development Corporation Ltd., New Delhi

<u>Key Words</u>: Environment, environmental health, urban sanitation, urban water supply

128_____

KfW

KFW

KfW Frankfurt

Department L III a Palmengartenstrasse 5-9, 60325 Frankfurt Phone: 00 49 697 4310 Fax: 00 49 69 74313609

KfW New Delhi 21, Jor Bagh, New Delhi – 110 003 Phone: (011) 464 1202, 464 7113 Fax: (011) 464 1203

Number of Water and Sanitation Professional Staff: 4

Key Personnel (Frankfurt Office)

ROLAND MAEHRLE, Senior Project Manager E-mail:roland.maehrle@kfw.de

PETER HILLIGES, Project Officer E-mail: peter.hilliges@kfw.de

CHRISTIAN HAAS, Project Officer E-mail: christian.haas@kfw.de

Key Personnel (New Delhi Office)

FRANZ HALLER, Director E-mail: Kfwindia@vsnl.com

Sector Programme Size: DM 369 million (Loan: DM 87 million, Grant: DM 282 million)

Key Priorities/ Future Directions/ Policies The German Government's and KfW's Water and Environmental Sanitation Policy

The main aspects of the German Government's and KfW's policy and strategy for the Water Supply and Sanitation Sector in India are:

- Focus on rural water supply and on economically weaker sections.
- As a general principle: no water supply schemes without proper sanitation.
- Participatory and demand-based planning and implementation of projects, considering gender aspects.

<u>129</u>

 Recovery of at least cost for operation and maintenance, aiming, however, at full-cost recovery.

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- Decentralisation of operation and maintenance as well as tariff collection.
- Reform-oriented approach, both with regard to ownership (water user associations) and to the institutional framework.
- Introduction of commercial aspects in cost planning and pricing of water.
- Co-ordination with other donors, primarily on policy level (World Bank, DFID et al).

Projects Financed by the German Government through KfW Projects: Current

Value: DM 135 million (Loan: DM 40 million, Grant: DM 95 million)

<u>Project Name</u>

Location: Rajasthan

Rural Water Supply Rajasthan, Phase I

Contact: Peter Hilliges

Start Date: 1994

Completion Date: 2002

Key Partner: Government of Rajasthan

<u>Key Words</u>: rural water supply, rural sanitation, hygiene promotion, capacity building, community participation, gender, O&M, cost recovery, NGOs

Project Name

Location: West Bengal

Rural Water Supply West Bengal

Value: DM 50 millioN (Grant)

Contact: Peter Hilliges

Start Date: 1997

Completion Date: 2002

Key Partner: Government of West Bengal

<u>Key Words</u>: rural water supply, rural sanitation, hygiene promotion, capacity building, community participation, gender, O&M, cost recovery, NGOs

Project Name

Watershed Development Programme Maharashtra, Phase 1 Location: Maharashtra

Value: DM 12 million (Grant)

Contact: Christian Haas

Start Date: 1994

Completion Date: 2002

Key Partner: NABARD, WOTR

Key Words: environment, capacity building, community participation, NGOs, water resources management

<u>Project Name</u>

Watershed Development Programme Maharashtra, Phase 2 Location: Maharashtra

Value: DM 25 million (Grant)

Contact: Christian Haas

Start Date:1997

Completion Date: 2005

Key Partner: NABARD, WOTR

<u>Key Words</u>: environment, capacity building, community participation, NGOs, water resources management

Projects: Proposed

Project Nam	E Location: Maharashtra
TTOICCE Vann	2 LUCATION: Manarashira

Rural Water Supply Maharashtra

Value: DM 46.6 million (Loan)

Contact: Peter Hilliges

Start Date: 2000

Completion Date: To be decided

Key Partner: Government of Maharashtra

<u>Key Words</u>: rural water supply, rural sanitation, environment, hygiene promotion, policy reform, water quality, community participation, transforming institutions, demand assessment, gender, operation and maintenance, cost recovery, NGOs

Project Name	Location: West Bengal
Sanitation and Waste Disposal West Bengal	Value: To be decided
	Contact: Roland Maehrle
	Start Date: To be decided
	Completion Date: To be decided
	Key Partner: Government of, and Municipalities in, West Bengal
	Key Words: Urban sanitation, environment, hygiene promotion, policy reform, solid waste management, community participation, transforming institutions, public sector reform, demand assessment, gender, operation and maintenance, cost recovery
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<u>Project Name</u>	Location: Maharashtra
Watershed Development Programme Maharashtra, Phase 3	Value: DM 39 million (Grant)
	Contact: Chritian Haas
	Start Date: 2002
	Completion Date: 2008
	Key Partner: NABARD, WOTR
	Key Words: environment, capacity building, community participation, NGOs, water resources management
<u>Project Name</u>	Location: Rajasthan
Comprehensive Wadi & Watershed Development Programme	Value: DM 31 million (Grant)
	<u>Contact</u> : Chritian Haas
	Start Date: 2002
	Completion Date: 2008
	Key Partner: NABARD, WOTR
	Key Words: environment, capacity building, community participation, NGOs, water resources management

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Project Name	Location: Andhra Pradesh
Replication to other States	Value: DM 35 million
	Contact: Christian Haas
	Start Date: 2006
	Completion Date: 2008
	Key Partner: NABARD, WOTR
	<u>Key Words</u> : environment, capacity building, community participation, NGOs, water resources management

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The Water and Environmental Sanitation Sector in India

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Netherlands Development Co-operation

Royal Netherlands Embassy, Shantipath, Chanakyapuri, New Delhi-21 Phone: (011) 688 4951 Fax: (011) 688 4956

Number of Water and Sanitation Professional Staff: 2

Key Personnel

Mr C ROELS, Head Development Co-operation E-mall:c.roels@nde.minbuza.nl

Mr PAUL TER WEEL, Theme Expert E-mail: paul.ter.weel@nde.minbuza.nl

Mr AVINASH ZUTSHI, Senior Programme Officer-RDI E-mail: a.zutshi@nde.minbuza.nl

Mr P S RAO, Senior Programme Officer-RDII E-mail: p.s.rao@nde.minbuza.nl

Sector Programme Size: Currently Dfl 32.20 million(Grant: Dfl 32.20 million)

Project/Field Offices Andhra Pradesh - Hyderabad Phone: (040) 360 4728

Kerala - Thiruvananthapuram Phone: (0471) 325 907

Gujarat - Bhavnagar Phone: (0278) 431 430

Key Priorities/ Future Directions/ Policies

5/ Netherlands Development Co-operation - Water & Environmental Sanitation Policy

The policy document 'A world of difference' (1990) clearly defines the main objective for Dutch Policy on development co-operation as the alleviation of poverty, with attention for the themes of environmental management and the role of women in sustainable development. It stresses the importance of meeting the need for clean drinking water and sanitation as a weapon in the fight against poverty. The objective of Dutch policy on water and sanitation is to provide access to drinking water and sanitation for as many of the poor as possible on a sustainable basis.

'A world of dispute' (1993) develops these ideas further, and urges a more co-ordinated approach to political and development issues. It describes succinctly the present situation with regard to water in the world:

Water is needed to increase food production, provide energy, develop industry and hence employment, promote health (drinking water supplies) and maintain biological diversity and ecosystems. Much can go wrong with water. Water projects have a low yield, water is not inexhaustible, water pollution is an increasing problem, and large-scale abstraction of water threatens the balance of nature. Water is a scarce commodity, has an economic value, and should therefore be regarded as an economic good.

In 'The Foreign Policy of the Netherlands: A Review' (1995) the government emphasises the continuing pressing need to combat poverty, with special attention being required for the basic needs of the poorest groups, including safe drinking water and sanitary facilities.

The new emerging consensus within Netherlands Development Co-operation is to have a broader perspective with 'rural environment' as a theme. The theme would include water supply and sanitation, and water harvesting and conservation. Activities in the theme should result in sustainable water resources management over the long run, where environment and development of women would be the cross cutting themes of future strategies.

The programme in Netherlands Development Co-operation is currently being reorganised. The sector programme size would be much larger that that indicated her after the clubbing of programmes within NeDA. This would then include programmes being previously implemented under its land and water sector.

The Netherlands Development Co-operation is in the process of finalisation of policy dialogue with the Government of India and the state governments for the setting up of future programmes. These would be based on the guidelines of the Minister of Development Cooperation, Government of Netherlands. The guidelines prescribe the adherence to the acronym GAVIM:

- G Good Governance
- A Alleviation of Poverty
- V Women Development
- I Institutional Sustainability
- M Environmental Protection & Sustainability

The focus being on poverty alleviation as the ultimate goal, by encouraging donor coordination, coherence of activities and sector wide approaches. The programme in India supports the states of Andhra Pradesh, Kerala, and Gujarat.

Key Documents

Policy Document – A World of difference: a new frame of reference for development cooperation in the 1990s. Lower House of Dutch Parliament (1990).

Policy Document – A world of dispute: a survey of the frontiers of development cooperation. Lower House of Dutch Parliament (1993).

^{3.} The foreign policy of the Netherlands: a review. Netherlands Ministry of Foreign Affairs (1995).

Institutional Development: Netherlands Support to the water sector, 1988 – 1998; IOB Evaluations No 284; Policy and Operations Evaluation Department, March 2000.

Projects: Current

Project Name	Location: Ghogha (Gujarat)
Ghogha Regional Water Supply	<u>Value</u> : Dfl 25,398,104 (Grant)
and Sanitation Project	Contact: Rene Van Lieshout, Team Leader, World Bank S. Div Bhavnagar
	Start Date: August 1997
	Completion Date: August 2002
	Key Partner: GWSSB
	<u>Key Words</u> : rural water supply, rural sanitation, environment, hygiene promotion, policy reform, water quality, solid waste management, transforming institutions, demand assessment, gender, operation and maintenance, cost recovery, water resources management
<u>Project Name</u>	Location: Viziagram (Andhra Pradesh)
Local Water Supply and Sanitation Project, Viziagram	<u>Value</u> : Dfl 4,400,000 (Grant)
	Contact: Frank Hanrath, Team Leader, NAPO, Hyderabad
	Start Date: june 1997
	Completion Date: June 2001
	Key Partner: Public Health Engineering Department
	<u>Key Words</u> : rural water supply, rural sanitation, environment, hygiene promotion, policy reform, water quality, solid waste management, demand assessment, gender, operation and maintenance, cost recovery, water resources management
Project Name	Location: Kerala
Socio Economic Unit Foundation	Value: Dfl 4,700,000 (Grant)
	<u>Contact</u> : K N Panicker
	Start Date: April 1997
	Completion Date: September 2001
	Key Partner: KWA Kerala; Secretary of Local Administration; and Secretary
	<u>Key Words</u> : rural water supply, rural sanitation, environment; hygiene promotion, policy reform, water quality, solid waste management, demand assessment, gender, operation and maintenance, cost recovery, water resources management

The Water and Environmental Sanitation Sector in India

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Norwegian Agency for Development Cooperation

50 C, Shantipath, Chanakyapuri, New Delhi- 110 021 Phone: (011) 687 3532, 687 3138 Fax: (011) 687 3814

Number of Water Resources Management and Policy Staff: 4

Key Personnel

DR. PAUL VEDELD, Second Secretary (Development) E-mail: pal.vedeid@del.norad.no

TARA SHARMA, Adviser E-mail: tara.sharma@del.norad.no

G V RAO, Adviser E-mail: g.v.rao@del.norad.no

RENU WADHWA, Adviser E-mail: renu.wadhwa@del.norad.no

Sector Programme Size: US\$ 38.7 million (Grant: US\$ 24.9 million)

Key Priorities/ Future Directions/ Policies

Aims And Scope

The overall aim for Norwegian Development Co-operation is to contribute to lasting improvements in economic, social and political conditions for the populations of developing countries. Development assistance should in particular benefit poor and deprived people. Least developed countries are given particular emphasis. Development assistance should be designed so that it seeks to avoid dependence upon continued assistance and that it enhances a genuine recipient responsibility for the various supports embarked upon.

Norwegian development co-operation aims at strengthening the developing countries' own ability and willingness to reduce their poverty problems. It also aims at promoting economically and environmentally sustainable development and to enhance good governance through institutional capacity building in planning and management activities. Important target areas for Norwegian development assistance include the strengthening of sectors such as food production, health, natural resource management, education and the promotion of employment opportunities, in order to ensure that development processes benefit also poor people. Such strategies must be developed and adapted separately for the individual developing country.

Crosscutting themes with major bearings for Norwegian assistance thus include concerns for the environment, for women, children and economic/social development, peace, democracy and human rights, institutional capacity building and improving the economy in assisted countries.

The main thrust of Norwegian development co-operation is long term assistance provided in the form of grants. The assistance is untied, i.e. granted without particular conditions requiring that funds be used for the purchase of goods and services from the donor country. A smaller portion is used for short-term emergency relief. In addition, Norway provides special assistance to business trade and industry. Such assistance deviates from the principle of untied assistance.

Development assistance is administered with the intention of achieving a reasonable distribution between bilateral assistance, which goes directly to developing countries, and multilateral assistance, which is channelled through the UN-system and development banks.

Since 1995 India is no longer among Norway's country programme partners. The co-operation has nevertheless continued albeit on a reduced scale. Priority sectors for Norwegian assistance to India, revised in 1996, were environment, basic education and efforts for eradication of child labour, assistance to women and cultural co-operation. With India's nuclear missile tests in 1998, Norway followed suit with other donors and reduced the development assistance in general. Research and commercial sector co-operation have been put under suspension as have high tech environmental programmes. Still, rather close political contact and cultural co-operation has been maintained in this period.

Collaboration is now geographically concentrated to the states of Himachal Pradesh, Karnataka and Orissa.

Norwegian development funds have been channelled through the public sector, but also increasingly Non-Government Organisations, private institutions, companies, and various other organisations have received funds and attention and become operational channels for development assistance activities.

Considerable funds have been allotted for women's social and economic development, for the eradication of child labour and for programmes promoting a wiser use of natural resources and for the reduction of air and water pollution activities. Less emphasis has in later years been put on productive and commercial sector programmes and on direct health related programmes.

Programme Assistance to India

Trends in development focus

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Future emphasis for development co-operation

Bilateral collaboration will be channeled through both state-to-state and private sector programmes. Long-term objectives will be to develop co-operation between the two countries with emphasis on the environment and the social sector with a special focus on poverty eradication.

There will be an increasing focus on the civil society and on enhancing institutional competence building in the public sector, in the private sector and among NGOs.

More focus will be put on the development of donor networks, both formal and in particular informal. Donor co-ordination is also in line with Norwegian priorities concerning donor agency strategies.

Projects: Current

Project Name	Location: Himachal Pradesh
Himachal Pradesh Environmental Programme	Value: US\$ 7.6million (Grant: US\$ 1.6 million)
	Contact: Dr. P Vedeld
	Start Date: 1994
	Completion Date: 1999 (extended upto 2000)
	Key Partner: Government of Himachal Pradesh
	Key Words: capacity building, environment, environmental health, management of service providers, policy reforms, poverty, public sector reform, research, technical
	studies, transforming institutions, water resources management
Project Name	Location: Himachal Pradesh
Norwegian Environmental Programme, Himachal Pradesh	Value: US\$ 4.0 million (Grant: US\$ 3.20 million)
	Contact: Dr. P Vedeld
	Start Date: 1997
	Completion Date: 2002
	Key Partner: Government of Himachal Pradesh
	<u>Key Words</u> : capacity building, environment, environmental health, management of service providers, NGOs, operation and maintenance, policy reforms, poverty, public sector reform, research, solid waste management, technical studies, transforming institutions, water quality, water resources management

Project Name

Location: Karnataka

Indo Norwegian Environment Programme, Karnataka Value: US\$ 5.7 million (Grant: US\$ 1.0 million)

Contact: Dr. P Vedeld

Start Date: 1997

Completion Date: 2002

Kev Partner: Government of Karnataka

<u>Key Words</u>: capacity building, environment, environmental health, management of service providers, NGOs, operation and maintenance, policy reforms, poverty, public sector reform, research, solid waste management, technical studies, transforming institutions, water quality, water resources management

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Project Name	Location: Orissa
Orissa Environment Programme	Value: US\$ 5.2 million (Grant)
	Contact: Dr. P Vedeld
	Start Date: 1992
	Completion Date: 2000
	Key Partner: Government of Orissa
	<u>Key Words</u> : capacity building, environment, environmental health, management of service providers, NGOs, operation and maintenance, policy reforms, poverty, public sector reform, research, solid waste management, technical studies, transforming institutions, water quality, water resources management
<u>Project Name</u>	Location: Delhi
Utility Mapping in Delhi by NIC	Value: US\$ 2.7 million (Grant)
	Contact: Dr. P Vedeld
	Start Date: 1991
	Completion Date: 2000
	Key Partner: National Informatics Centre, New Delhi
	<u>Key Words</u> : capacity building, environment, management of service providers, operation and maintenance, research, solid waste management, technical studies, transforming institutions, urban sanitation, urban water supply

Project Name	Location: National
National Databuoy system	Value: US\$ 3.5 million (Grant)
	Contact: Dr. P Vedeld
	Start Date: 1996
	Completion Date: 1999
	Key Partner: National Institute for Ocean Technology, Chennai
	<u>Key Words</u> : capacity building, environment, environmental health, research, water quality, water resources management
<u>Project Name</u>	Location: Himachal Pradesh
Himachal Pradesh NGOs	Value: US\$ 1.00 million (Grant: US\$ 0.80 million)
	Contact: Dr. P Vedeld
	Start Date: 1999
	Completion Date: 2002
	Key Partner: Select NGOs of Himachal Pradesh
	<u>Key Words</u> : capacity building, environment, hygiene promotion, micro financing, NGOs, solid waste management, water quality, water resources management
Project Name	Location: Karnataka
Karnataka NGOs	Value: US\$ 2.50 million (Grant: US\$ 2.00 million)
	Contact: Dr. P Vedeld
	Start Date: 1999
	Completion Date: 2002
	Kev Partner: Select NGOs of Karnataka
	Key Words: capacity building, environment, hygiene promotion, micro financing,

<u>Key Words</u>: capacity building, environment, hygiene promotion, micro financing, NGOs, solid waste management, water quality, water resources management

<u>Project Name</u>	Location: Orissa
Orissa NGOs	Value: US\$ 2.50 million (Grant: US\$ 1.90 million)
	Contact: Dr. P Vedeld
	Start Date: 1999
	Completion Date: 2002
	Key Partner: Select NGOs of Orissa
	Key Words: capacity building, environment, hygiene promotion, micro financing, NGOs, solid waste management, water quality, water resources management
<u>Project Name</u>	Location: National (except Karnataka, Himachal Pradesh and Orissa)
All India NGOs	Value: US\$ 4.00 million (Grant: US\$ 3.00 million)
	Contact: Dr. P Vedeld
	Start Date: 1999
	Completion Date: 2002
	<u>Key Partner</u> : Select NGOs of All India (except those in the states of Karnataka, Himachal Pradesh and Orissa)
	<u>Key Words</u> :capacity building, environment, hygiene promotion, micro financing, NGOs, solid waste management, water quality, water resources management





Swedish International Development Co-operation Agency

Development Co-operation Section, Embassy of Sweden, Nyaya Marg, New Delhi – 110 021 Phone: (011) 687 5760 Fax: (011) 688 5540

Number of Water and Sanitation Professional Staff: 1

Key Personnel

RAMESH C MUKALLA, Programme Officer E-mail: ramesh.mukalla@sida.se

Sector Programme Size: 48.5 million Sek (Grant Aid)

Key Priorities/ Future Directions/ Policies

Sida Water and Environmental Sanitation Policy

The objectives of Swedish Development Co-operation are to promote economic growth, economic and social equality including gender equality, economic and political independence, the development of democracy, the sustainable use of natural resources and care for the environment.

India is one of the Asian countries that in the past has received regular support from Sweden.

Other countries that receive Swedish assistance are mainly in the southern and eastern parts of Africa together with Bangladesh, Vietnam, Cambodia, and Laos.

All funds through Sida are given on the Grant Aid basis. The grants are not tied to procurement in Sweden, except for projects in the energy sector.

The Indo-Swedish co-operation which has been terminated since Pokharan tests was concentrated in five major sectors:

- Social forestry and wastelands development
- Primary health
- Elementary and non-formal education
- Energy

Projects: Current

<u>Project Name</u>

Location: National

UNICEF, National Rural Water Supply and Sanitation Programme

146

Value: 48.5 million Sek (Grant)

Contact: Ramesh C Mukalla

Start Date: April 1, 1998

Completion Date: March 31, 2000

Key Partner: UNICEF, Government of India

<u>Key Words</u>: cost recovery, community participation, environment, gender, hygiene promotion, operation and maintenance, policy reform, rural, sanitation, water supply

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United Nations Development Program

55, Lodi Estate, New Delhi – 110 003 Phone: (011) 462 8877 Fax: (011) 462 7612

Number of UNDP Environment and GEF Division Water Group Staff: 2

Key Personnel

Dr PRADEEP MONGA, Assistant Resident Representative E-mail: pradeep.monga@undp.org

Sector Programme Size: US\$ 320,000 (Grant Aid)

Key Priorities/ Future Directions/ Policies

UNDP's Water Strategy

The Strategic Framework for the United Nations Development Programme (UNDP) 'Capacity Building for Sustainable Management of Water Resources and the Aquatic Environment', March 1998, highlights the six key characteristics of the UNDP's water strategy:

- · It links the entire continuum of freshwater, coastal and marine environments.
- It focuses on capacity building for management of water resources and aquatic environment.
- It builds on UNDP's proven strengths and capabilities.
- It is linked to UNDP's four areas of focus: poverty, livelihoods, environmental protection, and women.
- It embodies the international consensus of thinking on the most important interventions related to freshwater and oceans as represented by various conventions and agreements.
- It targets actions to address the four principal challenges associated with water scarcity and pollution, namely, food security; human health; decline of the aquatic environment; and social, economic and political stability.

The UNDP Advisory Note, Towards a Government of India-UNDP Country Co-operation Framework 1997-2001, November 1996, states the overall strategy for Government of India-UNDP co-operation.

The overriding goal for UNDP development co-operation in India under CCF-1 is to support national programmes in promoting growth with equity, with particular emphasis on human development and poverty reduction.

Four thematic objectives and areas of priority are recommended in the UNDP Advisory Note. These are:

- employment and sustainable livelihoods;
- access to basic services;
- management of development; and
- sustainable development

Ten programmes under the CCF-1 are identified covering the four thematic areas mentioned above. With respect to 1) employment and sustainable livelihoods, the Food Security Programme includes a component on people's participation in water resource management at grassroots level.

Moreover, with respect to 4) sustainable development, the Environment Programme emphasises on management of natural resources and water use.

The main outputs of the Environment Programme with respect to water use and management are an integrated approach to water management and a revival of traditional water harvesting and conservation systems.

The activities planned are participatory planning and management of water development projects, small grants to NGOs, micro-watershed schemes and spread of information.

The location is coastal areas (salinisation), polluted water sources, falling water table areas, dryland and unirrigated areas.

The executing or implementing agencies are state governments, NGOs and community groups, with participation from the Rajiv Gandhi Drinking Water Mission, Centre for Science and Environment, CGWC and UN Inter-Agency Support Group.

Key Documents

- The Strategic Framework for United Nations Development Programme (UNDP): 'Capacity Building for Sustainable Manadement of Water Pesources and the Aquatic Environment' March 1998
- Sustainable Management of Water Resources and the Aquatic Environment', March 1998.
 Advisory Note- 'Towards a Government of India-UNDP Country Co-operation Framework 1997-2001', November 1996.
- 3. Environment Programme Support, Government of India and UNDP Country Co-operation Framework- 1 (1997-2001), September 1997.

Projects: Current

<u>Project Name</u>	Location: National
UNICEF, Small Grants Facility to Support Initiatives in the Water and Environmental Sanitation Sector	<u>Value</u> : US\$ 300,000 (Grant)
	Contact: Dr Pradeep Monga, Environment and GEF Division
	Start Date: February 1999
	Completion Date: December 2000
	Key Partner: Ministry of Environment and Forests, The World Bank
	Key Words: rural water supply, rural sanitation, urban water supply, urban sanitation, water resources management, environmental health, community participation,

capacity building, research, gender, NGOs

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United Nations Educational Scientific and Cultural Organization (UNESCO)

UNESCO House, 8 Poorvi Marg, Vasant Vihar, New Delhi – 110 057 Phone: (011) 614 7310, 614 6308, 614 6285, 614 6588, 614 1437, 614 0038, 614 0039 Fax: (011) 614 3351, 614 2714

Key Personnel

M S ALAM, Sr. Programme Specialist (Science Operations) E-mail: ms.alam@unesco.org

R JAYAKUMAR, Programme Officer (Hydrology, Geology & CSI) E-mail: r.jayakumar@unesco.org

Sector Programme Size: US\$ 125,000 (Grant)

Key Priorities/ Future Directions/ Policies

Developments trends, strategies and priorities

The UNESCO's International Hydrological Programme (IHP) is a vehicle through which Member States can upgrade their knowledge of the water cycle and thereby increase their capacity to better manage and develop their water resources. It aims at the improvement of the scientific and technological basis for the development of methods for the rational management of water resources. The theme of the present cycle, Fifth Phase IHP-V (1996-2001), is Hydrology and Water Resources Development in a Vulnerable Environment.

The Programme is a framework for applied research and education in the field of hydrology and water management. It should be regarded as a dynamic concept whose aim is to improve the links between research, application, and education and to promote scientific and educational activities. There are three main clusters containing problems related to:

- Resource process and management studies
- Regional studies
- Transfer of knowledge, information and technology

The clusters interlink with each other. Within the set of these clusters, eight themes have been identified as a support structure for the whole programme. They cut across different

hydrological scales and different climatic regions, but have integrated water management in a vulnerable environment as a common issue. The eight themes are:

- 1. Global hydrological and biochemical processes
- 2. Eco-hydrological process in the surficial zone
- 3. Groundwater resources at risk
- 4. Strategies for water resources management in emergency and conflicting situations
- 5. Integrated water resources management in arid and semi arid zones
- Humid tropics hydrology and water management
- 7. Integrated urban water management
- 8. Transfer of Knowledge, Information and Technology

All the Member States coming under UNESCO New Delhi Office fall under the category of developing countries. They are still developing their agriculture and infrastructure to meet the needs of a very rapidly increasing population. All governments have given the highest priority to the provision of drinking water to all. These complex considerations necessitate an assessment, development, and management of available limited water resources. UNESCO is making efforts to assure trained manpower at all levels to meet the emerging challenges of scientific water management.

It is also engaged in providing:

- Strengthened support for regional environmental research and observation of the total Earth System;
- Research and studies at the local and regional scale on: the hydrological cycle, impacts
 of climate change; coastal zones; loss of bio-diversity; vulnerability of fragile ecosystems; impacts of changing land use, of waste and human attitudes and behaviour.
- Special efforts in education and in building up of scientific institutions as well as involvement of a wide segment of the population in environment and development problem solve.

UNESCO's Environment and Development in Coastal Regions and in Small Islands (CSI) initiative responds to calls for integrated approaches to major coastal problems. The CSI is implemented primarily through the development of pilot projects. Key themes include:

- Integrated freshwater management in islands and coastal cities
- · Sustaining coastal communities and the biological diversity upon which they depend
- · Rural-urban migration and the environmental quality of coastal settlements
- Impacts of coastal erosion and sea-level rise on society.

Projects: Current

Project Name	Location: Uttar Pradesh
International Post Graduate Course on	<u>Value</u> : US\$ 15,000 (Grant)
Hydrology	Contact: Dr R Jayakumar
	Start Date: Every year July (July 2000)
	Completion Date: Every next year June (June 2001)
	Key Partner: Department of Hydrology, University of Roorkee, Roorkee, UP
	Kev Words: capacity building, water resources management
Project Name	Location: ICIMOD, Kathmandu Nepal
Regional capacity building workshops on	Value: US\$ 10,000 (Grant)
Hindu Kush Himalayan-Flow Regimes from International Experimental Network	Contact: Dr R Jayakumar & HKH-FRIEND Secretariat, MNR division
Data (HKH-FRIEND)	Start Date: March 2000
	Completion Date: December 2001
	<u>Key Partner</u> : ICOMOD, Kathmandu, National Focal Points for HKH-FRIEND Project from India, Nepal, Bhutan, Bangladesh, China, Pakistan, Myanmar
	Key Words: water resources management, capacity building
Project Name	Location: Delhi
Regional Workshop on Eco-hydrology (Sediment process In reservoir and deltas)	<u>Value</u> : US\$ 7,500 (Grant)
	<u>Contact</u> : Dr R Jayakumar
	Start Date: March 2001
	Completion Date: December 2001
	Kev Partner: School of Environmental Sciences JNU, New Delhi, NIH Roorkee
	Key Words: water resources management, environment, water quality

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Project Name	Location: Tamil Nadu
Regional Workshop on Groundwater Quality Modelling - Applications of Various	Value: US\$ 7,000 (Grant)
Modelling Techniques	<u>Contact</u> : Dr R Jayakumar
	Start Date: March 2001
	Completion Date: December 2001
	Key Partner: Centre for Geo-Science and Engineering, Anna University, Chennai,
	Central Ground Water Board, Government of India
	Key Words: water quality, technical studies, environment
Project Name	Location: Delhi
International Conference on Integrated Water Resources Management for	<u>Value</u> : US\$ 5,000 (Grant)
Sustainable Development	Contact: Dr R Jayakumar
	Start Date: August 2000
	Completion Date: December 2000
	Kev Partner: Ministry of Water Resources, GOI, National Institute of Hydrology, Roorkee
	Key Words: water resources management, water quality, environment
	and the second
Project Name	Location: Karnataka
NIH/KFD/UNESCO Project on "Hydrology Evaluation of the Impact of Forest	<u>Value</u> : US\$ 5,000 (Grant)
Rehabilitation Strategies" Karnataka State Forests of Western Ghats, India	Contact: Dr R Jayakumar
	Start Date: II Phase will start during April-May 2001
	Key Partner: National Institute of Hydrology, Karnataka Forest Department
	Key Words: environment, community participation, research

Project Name	Location: Gujarat
Pilot Project on Environmental, Social and	<u>Value</u> : US\$ 12,500 (Grant)
Cultural Implications of a Ship-breaking Industry, Alang-Sosia, Gujarat, India	Contact: Dr R Jayakumar
	Start Date: September 2000
	Completion Date: April 2001
	<u>Key Partner</u> : Bhavnagar University, Gandhi Labour Institute, Gujarat Ecological Commission, Gujarat Maritime Board

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<u>Key Words</u>: environment, environmental health, water resource management, community participation, research

The Water and Environmental Sanitation Sector In India







United Nations Inter Agency Working Group on Water and Environmental Sanitation

UNICEF – WESS, 73, Lodhi Estate, New Delhi -110 003 Phone: (011) 469 0401 extn.1318 Fax: (011) 462 7521, 469 1410

Key Personnel

RUPERT TALBOT, Chairperson Rtalbot@unicef.org

AKHILESH GAUTAM, Coordinator - UN IAWG WES E-mail: Agautam@unicef.org

Annual Programme Size: Rs 1,300,000 approx. (Grant)

Key Priorities/ Future Directions/ Policies

The Working Group

The UN-IAWG-WES is a common forum for UN agencies working in the water and sanitation sectors. The forum was established in April 1996 with three broad mandates,

- 1. Learning and communication
- 2. Policy dialogue and reforms
- 3. Sharing information

The UN-IAWG-WES (the Working Group) is a co-ordinating mechanism which aims at building consensus and creating convergence among sector partners. It has an operational perspective on UN reform efforts and works towards a closer collaboration between UN agencies and other development agencies to improve the quality and efficiency of programmes in the sector. The Working Group does not restrict its dialogue to UN agencies alone; working relationships have been established with line ministries of the Government of India (Gol), sector agencies, and are expanding to include NGOs and community-based organisations. Recent global conferences which have further emphasised the importance of applying knowledge and experience in a more focused manner to achieve improved impacts and greater sustainability of benefits in development programmes serve as mandates for the UN-IAWG-WES' work. The Working Group is chaired by the UNICEF and has six other members: UNDP, WHO, FAO, UNESCO, The World Bank and WSP-SA.

Guiding Principles

The group has outlined a conceptual framework for the IAWG-WES' mandate and activities. The Group has three distinct and yet inter-connecting areas of operation that focuses on (i) Water for Food-Agriculture (ii) Water Resource and Environment and (iii) Water requirement for Domestic use in both rural and urban areas. Each of these three areas of interest has different stakeholders yet there are common themes cutting across them. Given the crisis scenario in the water sector and its strategic importance to all the UN agencies, Water has been considered as an UNDAF subject for gender and decentralisation theme. Therefore, IAWG-WES has broadened its partnership to include the Government, ESAs, NGOs, and private sector. Besides, the government ownership over the initiatives undertaken by the UN system would be instrumental for effective interventions of IAWG-WES forum.

The ultimate objective of collaboration in the water sector is to increase the sustainability and impact of investments, both public and private. Achieving this will require development of a common understanding of sector issues and reaching agreement on implementation strategies. The pooling of resources from participating agencies is one of the means to maximise the impact of limited resources and to effectively utilise each agency's comparative advantage(s) within a common framework. This co-ordination is expected to increase the overall impact of development assistance to India and to facilitate the exchange of knowledge and best practices across institutional boundaries.

Future Directions The Working Group publishes thematic documents such as "Johad Watershed". Johad is a traditional watershed technology used extensively in Rajasthan for storing rainwater. SANGAM the joint UN newsletter published twice a year will continue to serve as interactive forum for WES players in India. Water quality, source sustainability and WES in urban areas will guide the future activities of the working group through sector co-ordination meetings with participation of Government of India, External Support Agencies and NGOs.

Projects: Current

Project Name	Location: New Delhi
Celebration of World Water Day	<u>Value</u> :Rs 45,000 (Grant)
	<u>Contact</u> : Akhilesh Gautam
	Start Date: March 22 every year
	Key Partner: UN Agencies, Ministry of Water Resources - Government of India, ESAs and NGOs
	Key Words: NGOs, water resources management

Location: National and relevant to the South Asia
Value: Rs 1,000,000 (Grant)
Contact: Akhilesh Gautam
<u>Start Date</u> : January 2000
Completion Date: December 2000
Key Partner: UN agencies, ESAs, Gol – RGNDWM and NGOs
Key Words: environment, NGOs, research, technical studies

<u>Project Name</u>	Location: National
Sector Co-ordination on WES	<u>Value</u> : Rs 60,000 (Grant)
	Contact: Akhilesh Gautam
	Key Partner: UN Agencies, ESAs, Gol - RGNDWM and NGOs
	Key Words: capacity building, private sector participation, public sector reform, environment, NGOs, research, technical studies

<u>Project Name</u>	Location: National
SANGAM - Joint UN Newsletter on WES	<u>Value</u> : Rs 200,000 (Grant)
	Contact: Akhilesh Gautam
	Start Date: Two issues every year
	Completion Date: April 2001
	Key Partner: WSP-SA, The World Bank, UNICEF, UNDP, UNESCO, FAO and WHO
	Key Words: environment, NGOs, research

The Water and Environmental Sanitation Sector in India

<u> 160</u>



United Nations Children's Fund

Child's Environment, Sanitation, Hygiene and Water Supply Section, UNICEF India Country Office, 73 Lodi Estate, New Delhi – 110 003 Phone: (011) 469 0401, 469 1401 Fax: (011) 462 7521, 469 1410

Number of Professional staff: 7

Key Personnel

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SUBHASH KHANNA, Consultant E-mail: skhanna@unicef.org

Sector Programme Size: US\$ 13.90 million in 2000 (Grant, General Resources: US\$ 5.25 million, DFID Funds (New): US\$ 5.76 million, SIDA Funds: US\$ 2.88 million)

Project/Field Offices

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Mumbai, Maharastra UNICEF, Ravindra Mansion, Dinsha Vacha Road, Mumbai 400 020 Phone: (022) 202 0010, 202 8063 202 7515, 202 7874 Fax: (022) 202 7819 E-mail: mumbai@unicef.org

Patna, Bihar UNICEF, 8, Patliputra Colony Patna 800 013 Phone: (0612) 261 621, 261 728 Fax: (0612) 261 620 E-mail: patna@unicef.org

Child's Environment: Sanitation, Hygiene and Water Supply

Programme Objectives

UNICEF is mandated by the United Nations General Assembly to advocate for the protection of children's rights, to help meet their basic needs and to expand their opportunities to reach their full potential.

The Government of India and UNICEF collaborate to work towards the goal of assuring every child the right to safe water and a clean environment. With considerable national achievements in provision of drinking water, the GOI-UNICEF programme makes a strategic shift to focus more intensively on environmental sanitation and hygiene. Ambitious goals for increasing sanitation coverage will be supported with major efforts in social mobilisation and behavioural change, using schools as important centres for creating new norms of hygiene in the community. The maturing of the water well drilling sector allows UNICEF to phase out support in this area, allowing attention to shift to water quality, sustainability, and the management of fresh water resources. The emerging urban environmental crisis mandates special attention. Resource, mobilisation, private sector involvement, and Government-civil society partnership will be important programme elements. Within this overall framework, UNICEF resources will focus on states/regions with the poorest indicators of children's wellbeing.

Specifically, the Government and UNICEF collaborate to:

- Increase awareness of families and communities on hygienic practices and the importance of safeguarding their immediate environment.
- Promote sanitation and hygiene in and through schools to bring about behavioural change and to enable all children to realise their right to basic education.
- Increase access to sanitary means of excreta disposal and a safer environment for children.
- Strengthen community participation and promotion of the active involvement of women in the national water supply and sanitation programmes.
- Ensure access to safe drinking water for the remaining 14 per cent of the population.
- Create a sustainable water environment in the country.

Programme Strategy

The Government of India and UNICEF Programme strategy extends support to the country's efforts to assure every child the right to safe water and a clean environment by:

- Promoting education for behavioural change by simple practices such as hand washing after defecation and before eating.
- Improving quality and sustainability by development of appropriate, simple technologies that will enable communities to test the quality of water.
- Enhancing community participation, which will entail a shift in strategy from a supplydriven welfare approach to a demand-driven strategy, calling for a greater degree of community participation.
- Encouraging innovative approaches to reach socially backward communities or difficult to reach areas and ensure sustainability of investments.

Key Documents

^{1.} A Programme for Children and Women in India - Plan of Operations 1999-2002; Government of India In co-operation with the United Nations Children's Fund.

 Promoting inter-sectoral convergence by working closely with other departments and programmes, to bring water and sanitation service providers into a closer and more responsive working relationship

Projects UNICEF plays a catalytic role in the water and sanitation sector, focussing more on environmental sanitation and hygiene, as well as its sustainability. The emerging urban environment is receiving special attention. In water supply, attention has shifted to water quality, rejuvenation of drilled wells, decentralised systems for maintenance and repair, and the management of fresh water resources.

Within this overall framework, almost half of UNICEF - WES resources flow to six major states of Bihar, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and Assam which have the poorest indicators and record of child survival towards child's environment programme and development rights, while 30 per cent of resources are devoted to seven other non-focus states. The balance UNICEF resources are used in the remaining states and national level activities.

The main objectives of this project are to:

- Promote the seven components of sanitation through govt. and NGO channels;
- Scale up alternate delivery and credit mechanisms.
- Develop a suitable communication and social mobilisation strategy for promoting improved hygiene behaviour.
- Expand the scope of the CDD-WASTAN strategy to include nutrition for a better synergistic effect.

Project 2 Rural Water Supply

Project 1

The main objectives of this project are to:

- Develop sustainable technologies and community-based approaches.
- Develop operational systems for community-based water quality surveillance and home/ community water treatment.
- Establish decentralised systems for operation, maintenance and repair of water supply systems
- Develop approaches for improved management of fresh water resources.

Project 3 Urban Environment

The main objectives are to:

- Advocate for policy change towards a better environment for the urban poor.
- Establish strong slum networking in selected cities.
- Identify and develop community-based demonstration projects for home sanitation and solid waste management.
- Establish linkages with urban CCA.

<u>Project 4</u> MIS and Surveillance

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The main objectives are to:

- Establish an effective system for community-based monitoring.
- Provide timely reporting on the implementing of the programme.

and Hygiene

Environmental Sanitation

Partnerships	Alliances are strengthened with NGOs and other partners in civil society. Some of the
	partner agencies include NDDB, Co-operative Unions, All India Women's Conference, Bharat
	Scouts and Guides, Mahila Samakhyas, Nehru Yuvak Kendras and NSS. UNICEF works closely
	with other UN agencies supporting the WatSan sector, in particular UNDP, UNDP/World
	Bank Regional Water and Sanitation Group, World Bank and WHO. The World Wide Fund for
	Nature (WWF) is another important partner. Co-ordination with other donor agencies in the
	sector, including the Dutch Government, DFID, SIDA, DANIDA, Water Aid, USAID, etc, is
	further strengthened.

UNICEF recognises the importance of training and capacity building in water and environmental sanitation and supports both sector-wide and project specific human resource development.

UN Inter Agency Working Group Water & Environmental Sanitation

UNICEF currently hosts this working group and has provided the Co-ordiantor.

Budget Subject to availability of funds, UNICEF will allocate about US\$ 5 million per year in General Resources and US\$ 7 million in Supplementary Funds to the Child's Environment programme. The supplementary funds will be solicited from donors jointly with Government of India.

UNICEF funds will be primarily used for:

- Social mobilisation, information, communication, health education;
- Capacity building;
- Alternate delivery systems and credit mechanisms;
- Development and documentation of sector policies and approaches;
- Production of IEC materials;
- Commissioning of studies and surveys.

Projects: Current

<u>Project Name</u>

Child's Environment: Sanitation, Hygiene and Water Supply Location: Andhra Pradesh Value: US\$ 818,000 (Grant)

Contact: Dev Vaish, Project Officer - WESS, UNICEF, Hyderabad

<u>Key Partner</u>: Andhra Pradesh: Public Health Engineering Department, Rural Development Department and Zilla Parishads.

<u>Key Words</u>: environment, hygiene promotion, community participation, rural sanitation, rural water supply, water resources management, water quality, solid waste management, gender, health, NGOs

<u>Project Name</u>

Location: Assam

Child's Environment: Sanitation, Hygiene and Water Supply

Value: US\$ 594,000 (Grant)

Contact: Chandan Sengupta, Project Officer - WESS, UNICEF, Calcutta

Key Partner: Public Health Engineering Department.

<u>Kev Words</u>: hygiene promotion, environmental health, gender, health, community participation, NGOs, poverty, rural sanitation, rural water supply, water resources management, water quality, solid waste management

<u>Project Name</u>

Location: Bihar

Child's Environment: Sanitation, Hygiene and Water Supply

Value: US\$ 1,056,000 (Grant)

Contact: Dipak Roy, Project Officer - WESS, UNICEF, Patna

Key Partner: Public Health Engineering Department

<u>Key Words</u>: hygiene promotion, environmental health, gender, health, community participation, NGOs, poverty, rural sanitation, rural water supply, water resources management, water quality, solid waste management

Project Name

Location: Gujarat

Child's Environment: Sanitation, Hygiene and Water Supply

166

Value: US\$ 515,000 (Grant)

Contact: Arun Mudgerikar, Project Officer - WESS, UNICEF, Gandhinagar

Key Partner: Ground Water Supply & Survey Board, Zilla Parishads

<u>Key Words</u>: hygiene promotion, environmental health, gender, health, community participation, NGOs, poverty, rural sanitation, rural water supply, water resources management, water quality, solid waste management

<u>Project Name</u>	Location: Karnataka
Child's Environment: Sanitation, Hygiene and Water Supply	Value: US\$500,000 (Grant)
	Contact: Dev Vaish, Project Officer - WESS, UNICEF, Hyderabad
	Key Partner: Karnataka: Public Health Engineering Department and Zilla Parishads
	Key Words: hygiene promotion, environmental health, gender, health, community participation, NGOs, poverty, rural sanitation, rural water supply, water resources management, water quality, solid waste management

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Project Name	Location: Kerala
Child's Environment: Sanitation, Hygiene and Water Supply	<u>Value</u> : US\$ 400,000 (Grant)
	Contact: Jaya Gokulmani, Project Officer – WESS, UNICEF, Chennai
	Key Partner: Department of Rural Development
	Key Words: hygiene promotion, environmental health, gender, health, community participation, NGOs, poverty, rural sanitation, rural water supply, water resources management, water quality, solid waste management

Project Name

Child's Environment: Sanitation, Hygiene and Water Supply Location: Madhya Pradesh

Value: US\$ 1,559,000 (Grant)

Contact: Dauda Wurie, Project Officer - WESS, UNICEF, Bhopal

Key Partner: Public Health Engineering Department, Panchayati Raj Department

Kev Words: hygiene promotion, environmental health, gender, health, community participation, NGOs, poverty, rural sanitation, rural water supply, water resources management, water quality, solid waste management

<u>Project Name</u>

Location: Maharashtra

Child's Environment: Sanitation, Hygiene and Water Supply Value: US\$ 500,000 (Grant)

Contact: Renu Gera, Project Officer - WESS, UNICEF, Mumbai

Key Partner: Water Supply & Sanitation Department, Groundwater Survey Development Agency, Zilla Parishads.

<u>Key Words</u>: hygiene promotion, environmental health, gender, health, community participation, NGOs, poverty, rural sanitation, rural water supply, water resources management, water quality, solid waste management

Project Name

Location: Orissa

Child's Environment: Sanitation, Hygiene and Water Supply <u>Value</u>: US\$ 1,060,000 (Grant)

Contact: Abdul Kalam, Project Officer - WESS, UNICEF, Bhubaneswar

Key Partner: Rural Water Supply & Sanitation Organisation (RWSSO)

<u>Key Words</u>: hygiene promotion, environmental health, gender, health, community participation, NGOs, poverty, rural sanitation, rural water supply, water resources management, water quality, solid waste management

Project Name

Location: Rajasthan

Child's Environment: Sanitation, Hygiene and Water Supply Value: US\$ 1,650,000 (Grant)

Contact: N Moorthy, Project Officer - WESS, UNICEF, Jaipur

Key Partner: Public Health Engineering Department, Zilla Panchyats, Panchayati Raj Department

<u>Key Words</u>: hygiene promotion, environmental health, gender, health, community participation, NGOs, poverty, rural sanitation, rural water supply, water resources management, water quality, solid waste management

Project Name

Location: Tamil Nadu

Child's Environment: Sanitation, Hygiene and Water Supply

Value: US\$ 450,000 (Grant)

Contact: Jaya Gokulmani, Project Officer- WESS, UNICEF, Chennai

Key Partner: Tamil Nadu: TWAD Board, Department of Rural Development

<u>Key Words</u>: hygiene promotion, environmental health, gender, health, community participation, NGOs, poverty, rural sanitation, rural water supply, water resources management, water quality, solid waste management

Project Name	Location: Uttar Pradesh
Child's Environment: Sanitation, Hygiene and Water Supply	<u>Value</u> : US\$ 1,200,000 (Grant)
	Contact: S R Mendiratta, Project Officer- WESS, UNICEF, Lucknow
	Key Partner: Panchayati Raj Department (Sanitation), UP Jal Nigam (Water Supply)
	Key Words: hygiene promotion, environmental health, gender, health, community participation, NGOs, poverty, rural sanitation, rural water supply, water resources management, water quality, solid waste management

Project Name Location: West Bengal

Child's Environment: Sanitation, Hygiene and Water Supply Value: US\$ 1,150,000 (Grant)

Contact: Chandan Sengupta, Project Officer - WESS, UNICEF, Calcutta

<u>Key Partner</u>: West Bengal: Panchayati Raj Department (Sanitation) & Public Health Engineering Department (Water); Zilia Parishads

<u>Key Words</u>: hygiene promotion, environmental health, gender, health, community participation, NGOs, poverty, rural sanitation, rural water supply, water resources management, water quality, solid waste management

The Water and Environmental Sanitation Sector in India

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170

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USAID - Regional Urban Development Office (United States Agency for International Development)

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Number of RUDO professional Staff: 5

Key Personnel

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ANAND RUDRA, Project Management Assistant E-mail: arudra@usaid.gov

<u>Sector Programme Size</u>: Urban Environment – US\$ 125 million (Loan: \$ 125 Million in USAID Loan Guarantee Funds, Grant: \$31 Million in Development Assistance Funds)

Project Offices: All project offices are in Delhi

Regional Urban Development Office Strategy

The Regional Urban Development Office for South Asia (RUDO/New Delhi) assists USAID Resident Country Missions in South and Central Asia to conceptualize and implement the urban facets of their program priorities and strategic objectives. The principal areas of RUDO activity include: (i) improving the quality of and expanding access to information on urban issues; (ii) improving the human and financial capacity of local governments to manage the urban environment; (iii) improving local government, private developer, NGO and community-based financial institutions' access to capital market resources; and (iv) implementing urban environmental infrastructure improvement programs.

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The RUDO is responsible for framing the policy and strategic direction of USAID's shelter and urban programs in the South and Central Asia region, including Sri Lanka, India, Nepal, Bangladesh and Kazakhstan; programming and managing technical assistance and training resources with USAID Resident Missions; designing uses of USAID's loan and loan guaranty resources; and managing the implementation of on-going Urban and Environmental Credit Guaranty projects in the region.

Projects: Current

<u>Project Name</u>

Improvement of Community Based Environmental Infrastructure Value: US\$ 350,000

Location: Gujarat

Contact: Renana Jhabvala and Bijal Bhatt, GMHST, Ahmedabad

Start Date: November 1999

Completion Date: May 2001

Key Partner: HUDCO & Gujarat Mahila Housing SEWA Trust (GMHST)

Key Words: environment, health, microfinancing, environmental health, poverty

<u>Project Name</u>

Community Based Environmental Improvement Program Location: Uttar Pradesh

Value: US\$ 9,000

Contact: Dr Deshbandhu, IES, New Delhi

Start Date: October 2000

Completion Date: September 2001

Key Partner: Indian Environmental Society (IES)

<u>Key Words</u>: urban sanitation, hygiene promotion, solid waste management, environment

<u>Project Name</u>

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F.I.R.E (Financial Institutions Reform & Expansion) Project Location: Tamil Nadu, Gujarat, Maharashtra, Andhra Pradesh

Value: US\$ 125 Million Housing Guaranty (\$31 Million Development Assistance)

Contact: N Bhatacharjee, USAID/New Delhi, American Embassy, New Delhi

Start Date: 1994

Completion Date: 2003

<u>Key Partner</u>: Ministry of Urban Development, National Institute of Urban Affairs, HUDCO and Infrastructure Leasing & Financial Services

<u>Kev Words</u>: environment, cost recovery, private sector participation, transforming institutions, management of service providers, community participation

Project Name Location: Tamil Nadu, Ke	rala
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Community Based Environmental Improvement Program Value: US\$ 6,000

Contact: T K Ramkumar, Exnora International, Chennai

Start Date: October 2000

Completion Date: September 2001

Key Partner: EXNORA, Chennai; Cochin Municipal Corporation

Key Words: urban sanitation, hygiene promotion, solid waste management, environment

The Water and Environmental Sanitation Sector in India



Water and Sanitaion Program -South Asia (WSP - SA)

55 Lodi Estate, P.O. Box 416, New Delhi – 110 003 Phone: (011) 469 0488, 469 0489 Fax: (011) 462 8250

Number of water and sanitation professional staff: 4 in the India Country Team and 2 in the Regional Team

Key Personnel (India Country Team)

SATYAJIT SINGH, Rural Specialist E-mail: ssingh5@worldbank.org

PUSHPA PATHAK, Urban Specialist E-mail: ppathak@worldbank.org

MIKE WEBSTER, Rural Specialist E-mail: mwebster@worldbank.org

Key Personnel (Regional Team)

JUNAID K AHMAD, Regional Team Leader E-mail: jahmad@worldbank.org

CLARISSA BROCKLEHURST, Regional Urban Specialist E-mail: cbrocklehurst@worldbank.org

Sector Programme Size: US\$ 1.5 million per annum approximately (Technical Assistance and some grants)

Water and Sanitation Program

The Mission Statement

The Program helps poor gain sustained access to improved water and sanitation services

The Ten Year Water and Sanitation Vision for South Asia

One billion poor women and men recognised as valid consumers of safe and affordable water and sanitation services. A range of efficient, self-sustained, and well-regulated public and private agents deliver such services.

The Role of WSP-SA

WSP-SA strives to support the reform of water and sanitation services for the poor in South Asia by becoming the leading source of field acquired knowledge, facilitating change & building partnership & advice for policy reform and investment decisions across the region.

Background The Water and Sanitation Program is an international partnership. It has 50 professional staff, mainly field based, in regional country offices, supported and managed by small team of technical and administrative staff at the headquarters office located at the World Bank in Washington. UNDP, the World Bank, and 15 bilateral donor agencies fund the Program.

In South Asia, the WSP-SA is responsible for co-ordinating programs in five countries: India, Pakistan, Bangladesh, Nepal, and Sri Lanka. In India, the Program has a rapidly growing workplan that increasingly focuses on the issues of urban service provision to the poor but continues to work in its traditional area of rural water supply and sanitation. In urban areas the Program is building up a body of understanding and experience which will help to ensure that the needs and demands of poor people residing in urban areas are met, and do not get lost between the endemic failure of centrally planned systems on the one hand, and the scramble to "commercialise" and "privatise" on the other. The Program also maintains a substantial role in the rural water supply and sanitation sector, and is committed to increasing understanding of the modalities of implementing demand-responsive investments.

The Program operates through partnerships with client governments, non-governmental organisations, and donors. It works on pilot investment projects, large scale investment projects which are testing innovative approaches, and on documenting and disseminating lessons from its own and its partners work. A commitment to capacity building is central to all Program activities. The Program works through a formal strategic partnership with the Rajiv Gandhi National Drinking Water Mission.

WSP-SA in India In India, the Program has developed a specific vision for the coming ten years which reflects the national sector and its potential. The ten year vision states that: in the rural sector all lead national institutions should be extending the reform process and all rural water supply and sanitation investments will be made within the reform framework. A substantial proportion of small towns will have self-sustained services and urban local authorities will control their finances. In urban areas, all major utilities will have explicit institutional relationship with poor consumers; and across the sector, there will be a vibrant private sector, water will be efficiently and fairly allocated across sectors, and there will be functioning regulatory frameworks.

Reform For the Program "reform" in the rural water supply, sanitation, rural development and urban services sectors, is evidenced in a State or organisation: by the implementation of ongoing projects with a demand responsive approach to service delivery, through the development of policies strongly oriented towards equity and the poor, through an integrated (but discrete) approach to water supply and sanitation (including hygiene promotion), and through the presence of an overall pro-reform enabling environment including strong regulatory systems.

Other Relevant Projects/ Initiatives

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Regional studies on private sector participation contract management, corruption, micro credit for infrastructure (urban and rural), urban poverty, rural institutions, and their management. Also major staff inputs and learning from World Bank investments in Rural Water Supply and Sanitation in UP, Karnataka, Kerala and new pipeline projects and active collaboration on many DFID and other donor projects and programmes.

As part of the learning and communication initiative, the Program produces regular knowledge products based on project experiences and lessons in India. The Program also produces a newsletter *Jalvani* a quarterly newsletter on rural water supply and sanitation, jointly produced with the Rajiv Gandhi National Drinking Water Mission, and Nagri produced by the Urban Think Tank highlighting issues of municipality management and service provision for the poor.

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Projects: Current (Policy and Investment)

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<u>Project Name</u>	Location: National and the states of Andhra Pradesh and Kerala
Translating RWSS Policy Reforms into Reality; a Strategy for Change	Value: US\$ 1.39 million
	<u>Contact</u> : Satyajit Singh
	Start Date: September 1999
	Completion Date: August 2002
	Key Partner: Rajiv Gandhi National Drinking Water Mission, DFID, World Bank
	<u>Key Words</u> : capacity building, community participation , cost recovery, environment, hygiene promotion, policy reform, operation and maintenance, research, rural sanitation, rural water supply, transforming institutions
Project Name	Location: National
Urban Environmental Sanitation: Capacity Building for Municipal and National Decision Makers	Value: US\$ 1 million
	<u>Contact</u> : Pushpa Pathak
	Start Date: April 1998
	Completion Date: March 2001
	Key Partner: Ministry of Urban Affairs and Employment, DFID
	Key Words: capacity building, community participation, cost recovery, demand assessment, environment, hygiene promotion, operations and maintenance, policy reform, solid waste management, transforming institutions, research, urban water supply, urban sanitation

The Water and Environmental Sanitation Sector in India

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178_____



World Bank Infrastructure Unit

The World Bank, 70, Lodi Estate, New Delhi – 100 003 Phone: (011) 461 7241, 461 9491 Fax: (011) 461 9393, 462 8073 Website: www.worldbank.org.in

Number of water and sanitation professional staff: 2

Key Personnel

ROBERT MAURER, Lead Urban Sector Specialist E-mail: rmaurer@worldbank.org

SHYAMAL SARKAR, Senior Sanitary Engineer E-mail: ssarkar@worldbank.org

Sector Programme Size: Approximately US\$ 230 million (Loan: Investment Loan)

Key Priorities/ Future Directions/ Policies

World Bank Lending Water and Sanitation Infrastructure

Bank support to the sector is always in line with its Country Assistance Strategy (CAS) for India. The CAS details the strategic dimensions of Bank support and is agreed in consultation with the Government of India. The key dimensions of the CAS are:

- (i) Support states that commit strongly to reform;
- Build consensus and ownership of key areas of policy reforms with the partner clients;
- (iii) Focus on poverty alleviation activities;
- (iv) Give priority to social and environmental impacts; and
- (v) Promote private sector development.

Projects: Current

Project Name Location: Tamil Nadu Second Madras Water Supply Project Value: US\$ 141.2 million Contact: Shyamal Sarkar, World Bank Infrastructure Unit Start Date: 1995 Completion Date: June 2002 Key Partner: Chennai Metropolitan Water Supply and Sewerage Board Key Words: urban water supply, urban sanitation, environment, capacity building, operation and maintenance Project Name Location: Maharashtra Bombay Sewage Disposal Project Value: US\$ 295.6 million Contact: Shyamal Sarkar, World Bank Infrastructure Unit Start Date: 1995 Completion Date: December 2002 Kev Partner: Mumbai Municipal Corporation Key Words: urban sanitation, capacity building, operation and maintenance, community participation, NGOs

Projects under consideration

The Infrastructure Unit of the World Bank continues to work on new pipeline opportunities with the Government of India and state governments. The World Bank is also working in the area of municipal services and urban development with a number of pipeline projects under preparation.

For further information contact Robert Maurer of the World Bank Infrastructure Unit.



World Bank Rural Development Unit

The World Bank, 70 Lodi Estate, New Delhi – 110 003 Phone: (011) 461 7241, 461 9491 Fax: (011) 461 9393, 462 8074 Website: www.worldbank.org.in

Number of Water Resources Management and Policy Staff: 4

Key Personnel

G V ABHYANKAR, Senior Sanitary Engineer E-mail: gabhyankar@worldbank.org

SURYANARAYAN SATISH, Social Development Officer E-mail: ssatish@worldbank.org

DEEPAK AHLUWALIA, Senior Economist E-mail: dahluwalia@worldbank.org

R R MOHAN, Social Development Specialist E-mail: rmohan@worldbank.org

Sector Programme Size: Approximately US\$ 115 million (Invesment Loan)

Project/Field Offices

Lucknow, Uttar Pradesh Project Management Unit The Swajal Project 3 Fawn Brake Avenue Sarojini Naidu Marg Lucknow 226 001 Contact: M K Gupta, Director Phone: (0522) 239 428, 239 448 Fax: (0522) 237 709 E-mail: swajal@lw1.vsnl.net.in Karnataka, Bangalore PPMU, Department of Rural Development and Panchayati Raj Government of Karnataka Cauvery Bhavan, KHB Complex Bangalore 560 009. Contact: Raj Kamal, Director Phone: (080) 224 0508 Fax: (080) 224 0509 E-mail: dirppmu@vsnl.com ppmublr@vsnl.net.in

Project/Field Offices (cont.)

Trivandrum, Kerala Kerala Rural Water Supply and Sanitation Agency, 3rd Floor, PTC Towers Thampanoor, Trivandrum 695 001 Contact: James Varghese Executive Director Phone: (0471) 337 006 Fax: (0471) 337 004 E-mail: krwsa@satyam.net.in

Key Priorities/ Future Directions/ Policies

World Bank Water and Environmental Sanitation Policy

Bank support to the sector is always in line with its Country Assistance Strategy (CAS) for India. The CAS details the strategic dimensions of Bank support and is agreed in consultation with the Government of India. The key dimensions of the CAS are:

- Support states that commit strongly to reform;
- Build consensus and ownership of key areas of policy reforms with the partner clients;
- Focus on poverty alleviation activities;
- Give priority to social and environmental impacts; and
- Promote private sector development

Bank assistance to rural development focuses on supporting policy (e.g. cost recovery, privatisation) and institutional reforms at the state-level (e.g. beneficiary participation, demand-driven development activities, and reorientation of government/public sector roles and functions).

The sector-related goals in the CAS that are/will be addressed by Bank-assisted projects for rural water supply and environmental sanitation in India are:

- Adoption of a demand driven service delivery and use of participatory processes;
- Reorientation of the public sector function; and
- Reforms in cost recovery policies

Building consensus between the Bank and the interested state and ownership of the three key areas of policy and institutional reforms by the state, would be necessary pre-requisites for initiating the formal project preparation process for any new project. The three key areas of reform are:

- Adoption of a demand driven approach to service delivery and use of participatory process.
- Shifting the role of the government (at state, district and village level) from direct service delivery to that of planning, policy formulation, monitoring and evaluation and partial financial support.
- Partial capital cost financing and full operation and maintenance responsibility by the users.

Projects: Current

cost recovery, NGOs

Project Name

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<u>Project Name</u>	Location: Uttar Pradesh
ar Pradesh Rural Water Supply and Environmental Sanitation Project	Value: US\$ 52 million
	<u>Contact</u> : Deepak Ahluwalia
	Start Date: 1996
	Completion Date: 2002
	Key Partner: Government of Uttar Pradesh
	<u>Key Words</u> : rural water supply, rural sanitation, environment, hygiene promotion, policy reform, capacity building, solid waste management, community participation, transforming institutions, demand assessment, gender, operation and maintenance, cost recovery, NGOs
Project Name	Location: Karnataka
Karnataka Rural Water Supply and	Value: US\$ 92 million
Environmental Sanitation Project	Contact: G V Abhyankar
	Start Date: 1994
	Completion Date: 2000 September
	Key Partner: Government of Karnataka
	<u>Key Words</u> : rural water supply, rural sanitation, environment, hygiene promotion, policy reform, capacity building, solid waste management, community participation, transforming institutions, demand assessment, gender, operation and maintenance, cost recovery, NGOs
<u>Project Name</u>	Location: Kerala
Kerala Rural Water Supply and Environmental Sanitation Project	Value: US\$ 65.5 million (Loan)
	Contact: G V Abhyankar
	Start Date: 2000
	Completion Date: 2006 December
	Key Partner: Government of Kerala
	<u>Key Words</u> : rural water supply, rural sanitation, environment, hygiene promotion, policy reform, capacity building, solid waste management, community participation, transforming institutions, demand assessment, gender, operation and maintenance,

The Water and Environmental Sanitation Sector in India

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World Health Organization

534 'A' Wing, Nirman Bhavan, Maulana Azad Road, New Delhi - 110 001 Phone: (011) 301 8955, 379 2179, 379 3632 Fax: (011) 301 2450

Key Personnel

DR ROBERT J KIM- FARLEY, WHO Representative to India E-mail: kimfarleyr@whoindia.org

M M DATTA, National Professional Officer(Sanitary Engineer) E-mail: dattamm@whoindia.org

Sector Programme Size: US\$ 1,492,500 (Grant)

WHO Strategy for Health and Environment

Key Priorities/ W Future Directions/ Policies

WHO's Global Strategy for Health and Environment stress among other issues, the importance of mobilising the health sector for "sensitising" other health related sectors. Identifying health hazards and undertaking health risk assessment of various development programmes is also part of the strategy.

Health and environment issues are often multi-sectoral in nature, necessitating the involvement of many sectors and disciplines in addressing these complex issues. Concerns such as water pollution, air pollution, noise pollution, health care waste management, water quality surveillance, poison control, chemical safety etc. and even communicable and noncommunicable diseases, when factored out on to basic causes, reflect the need for action at many fronts.

Environmental health is a crucial issue cutting across several ministries and implementing agencies of Government of India. Environmental health comprises those aspects of human health, including quality of life, that are determined by chemical, physical, biological, social and psycho-social factors in the environment.

WHO Health and Environment Initiative aims at mobilising the health sector to "sensitise" other sectors, such as, environment, rural and urban developments, public works, housing, agriculture, industry to identify and assess hazards and health risk assessment and issues arising from the development process. The WHO India Country Office is in dialogue with the Government of India regarding Position Paper on Health and Environment. The 'Committee on Environment and Health' constituted by the Ministry of Environment and Forests in July 1999, has submitted its report to the Ministry in May 2000. It is expected that the process that has already started in India will conclude to formulate, endorse, and implement National Action Plan on Health and Environment.

Priority Areas WHO's priority areas are:

Water Supply and Sanitation

- Drinking water quality surveillance
- Basic sanitation and hygiene behaviours
- Excreta disposal/waste water disposal

Specific to urban context

- Drainage
- Sewerage and sewage treatment
- Healthcare waste management
- Water pollution
- Air pollution
- Noise pollution

Chemical Safety

Poison prevention and control

Food Safety

Food safety and hygiene promotion

Health Hazards Identification (HHI) & Health Risk Assessment (HRA) of development projects

• Health and Environment concerns for sustainable development (problems of vector-borne diseases, arsenic, fluoride, blood lead, silicosis and others as may be requested by GOI)

WHO Assistance WHO provides assistance to India on a biennium basis through the following services:

- Technical Support
- Training, fellowships and study tours;
- Group education activities;
- Publications in relevant areas;
- Short-term consultants and
- Supplies and equipment

WHO Collaboration

Collaboration with government is essential to ensure success of WHO programmes. Environmental health is a crucial issue cutting across several ministries and implementing agencies. These include:

- Ministry of Urban Development
- Ministry of Health and Family Welfare
- Ministry of Rural Development
- Ministry of Environment & Forests
- Ministry of Agriculture; and
- Ministry of Labour
- Confederation of Indian Industries (CII)
- Federation of Indian Chambers of Commerce (FICCI)

WHO Collaboration with UN System

- UNICEF
- UNDP
- UNDP/Water and Sanitation Program
 South Asia
- World Bank
- FAO
- UNESCO
- UNIDO
- UNIC

Projects: Current

WHO Collaboration with ESAs

- AAID
- ADB
- CDC
- CIDA
- DANIDA
- DFID
- GTZ
- SIDA
- USAID

Project Name Location: National Promotion of Environmental Quality Value: US\$ 219,500 (Grant) Contact: M M Datta Start Date: January 2000 Completion Date: December 2001 Key Partner: Ministry of Environment and Forests Key Words: environment, environmental health, health, water quality, technical studies Project Name Location: National National Food Safety Programme Value: US\$ 367,500 (Grant) Contact: M M Datta Start Date: January 2000 Completion Date: December 2001 Key Partner: Ministry of Health and Family Welfare

<u>Key Words</u>: community participation, environment, health, hygiene promotion, NGOs, policy reform, private sector participation, technical studies

Project Name Location: National

<u>Project Aume</u>	Location: National
Water Supply and Sanitation in Human Settlements (Urban)	Value: US\$ 119,000 (Grant)
	Contact: M M Datta
	Start Date: January 2000
	Completion Date: December 2001
	Key Partner: Ministry of Urban Development
	Key Words: urban water supply, urban sanitation, operation and maintenance, water quality, technical studies
Duoiost Marra	
<u>Project Name</u>	Location: National
Healthy Cities	<u>Value</u> : US\$ 188,700 (Grant)
	Contact: M M Datta
	Start Date: January 2000
	Completion Date: December 2001
	Key Partner: Ministry of Urban Development
	Key Words: health, environment, environmental health
<u>Project Name</u>	Location: National
Water Supply and Sanitation in Human Settlements (Rural)	<u>Value</u> : US\$ 210,800 (Grant)
	Contact: M M Datta
	Start Date: January 2000
	Completion Date: December 2001
	Key Partner: Ministry of Rural Development
	Key Words: rural water supply, rural sanitation, operation and maintenance, water quality, institutional reform, technical studies

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<u>188</u>

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Project Name

Location: National

Health in Sustainable Development

Value: US\$ 387,000 (Grant) <u>Contact</u>: M M Datta <u>Start Date</u>: January 2000 <u>Completion Date</u>: December 2001 <u>Key Partner</u>: Ministry of Health & Family Welfare <u>Key Words</u>: environmental health, solid waste disposal, technical studies

The Water and Environmental Sanitation Sector in India

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WaterAid - India

22A, 1st Street, New Colony Mannar Puram, Tiruchirapally, Tamil Nadu ~ 620 020 Phone: (0431) 422 276 Fax: (0431) 422 185

Key Personnel

S PARAMASIVAN, Country Representative E-mail: waindia@tr.dot.net.in

Sector Programme Size: Rs. 6,22,70,000 (Grant)

Key Priorities/ Future Directions/ Policies

WaterAid has been working in India since 1986 with the close collaboration of non-governmental organisations. The areas of its work are focussed towards provision of water, sanitation and hygiene promotion activities to rural poor who live in remote and resource poor areas. The current area of operation includes the States of Tamil Nadu, Andhra Pradesh, Karnataka, Maharashtra and Orissa, in the near future, some of the northern states will also be brought under its operational area. In this process, good relations with Governments in the States of operation and also with various key players in the water sector such as UNICEF, DFID, WSP-SA, CAPART, etc., has been developed. As a result, some of the programmes are being implemented with close collaboration and participation of Government and other related agencies.

WaterAid is committed to a vision of a world in which all people have access to safe water and effective sanitation facilities. Some of the guiding beliefs of WaterAid in order to respond to the enormous problems faced today are;

- Access to and control over safe drinking water and sanitation facilities, together with improved knowledge of hygiene practices, have direct impact on poverty by reducing the vulnerability of poor people, especially women and children, to disease, ill health and death. By using time and resources for economic and social development, these factors. have the power to create sustainable improvements in the lives of poor people
- Clean water and sanitation are essential for life, and as such, all people have the right to access them, especially poor individuals and families who are most often the ones without them?
- The interests of women and children are of primary concern.

191_

 Ultimately, it is the courage and resilience of poor men and women and their ability to find solutions to their problems through individual and community action that will lead them to better lives of hope and dignity. This strengthens WaterAid's conviction that decision-making should, as far as possible, take place as near as possible to the point of impact and be delegated to local partners and communities.

The following are some of the activities carried out to achieve the overall objectives of WaterAid;

- Provision of safe water, sanitation and hygiene promotion facilities to poor communities as an integrated programme rather than sectoral intervention.
- Capacity building for target communities and local partner agencies for spreading and sustaining the provisions.
- Involvement of key stakeholders.in the process of planning, monitoring and evaluation in all the areas of work.
- Providing emphasis on community based maintenance systems for long term selfreliance and for local solutions by users themselves.
- Promotion of appropriate and low cost technologies for enhancing poor communities ability to acquire the improved facilities.
- Encouraging local women self help groups to initiate credit facilities for toilet construction through awareness and training while encouraging both women groups and youth groups to manage and maintain rural sanitary marts and production centers for wider coverage and replication.
- Continued documentation and dissemination of experiences for wider adoption and replication.
- Promotion of network based approaches and active participation in existing other networks for effective and unified action to take up large-scale implementation, experience sharing, influencing policies and long term sustainability.

Projects: Current

Project Name	Location: Tamil Nadu, Karnataka and Andhra Pradesh
Urban Slum Projects	<u>Value</u> : Rs. 3,54,26,845 (Grant)
	<u>Contact</u> : S Paramasivan
	Start Date: August, 1999
	<u>Completion Date</u> : March 2003
	<u>Key Partner</u> : (i) Sevai, Scope, Gramalaya & Trichy Municipal Corporation – Trichy, Tamil Nadu (ii) DSS, Bangalore (iii) ASSIST – Guntur, Andhra Pradesh.
	Key Words: community participation, hygiene promotion, urban sanitation, urban water supply

<u>192</u>

<u>Project Name</u>	Location: Andhra Pradesh
Integrated Community based Handpump	Value: Rs.1,90,72,610 (Grant)
Maintenance Programme	Contact: S Paramasivan
	Start Date: January 1999
	Completion Date: December 2001
	Key Partner: 12 Partner NGOs of Viswasamakya Network
	<u>Key Words</u> : community participation, hygiene promotion, operation and mainte- nance, policy reform, rural sanitation, rural water supply
<u>Project Name</u>	Location: Andhra Pradesh
Integrated Water, Sanitation and	<u>Value</u> : Rs.1,74,46,721 (Grant)
Hygiene Promotion through Jalasamakhya Network	Contact: S Paramasivan
	Start Date: July 2000
	Completion Date: June 2003
	Key Partner: 11 partner NGOs of Jalasamakhya Network
	Key Words: community participation, hygiene promotion, operation and mainte- nance, policy reform, rural sanitation, rural water supply
Project Name	Location: Tamil Nadu
Institutional Building – Water Net Tamil Nadu	Value: (To be Proposed)
	Contact: S Paramasivan
	Completion Date: On going
	Key Partner: 29 Partner NGOs of Water Net Tamil Nadu Network
	Key Words: policy reform, management of service providers, transforming institu- tions, research, technical studies

.

Project Name

Location: Tamil Nadu

Integrated Water, Sanitation and Hygiene Promotion

Value: Rs. 5,50,00,000 (Grant)

Contact: S Paramasivan

Start Date: April 2000

Completion Date: March 2003

Key Partner: 29 Partner NGOs of Tamil Nadu State

<u>Key Words</u>: community participation, hygiene promotion, operation and maintenance, policy reform, rural sanitation, rural water supply, micro-financing

<u>Project Name</u>

Location: Karnataka

Integrated Water, Sanitation and Hygiene Promotion Value: Rs. 40,00,000 (Grant)

Contact: S Paramasivan

Start Date: April 2000

Completion Date: March 2003

Key Partner: 2 Partner NGOs of Karnataka State

Key Words: community participation, hygiene promotion, rural sanitation, rural water supply

Project Name

Location: Andhra Pradesh

Integrated Water, Sanitation and Hygiene Promotion

Value: Rs. 2,84,80,669 (Grant)

Contact: S Paramasivan

Start Date: April 2000

Completion Date: March 2003

Key Partner: 5 Partner NGOs of Andhra Pradesh State

Key Words: community participation, hygiene promotion, operation and maintenance, rural sanitation, rural water supply

Project Name	Location: Maharashtra
Integrated Water, Sanitation and Hygiene Promotion	<u>Value</u> : Rs. 1,80,00,000 (Grant)
	Contact: S Paramasivan
	Start Date: April 2000
	Completion Date: March 2003
	Key Partner: 4 Partner NGOs of Maharashtra State
	Key Words: community participation, hygiene promotion, operation and mainte- nance, rural sanitation, rural water supply
<u>Project Name</u>	Location: Orissa
Integrated Integrated Water, Sanitation and Hygiene Promotion	<u>Value</u> : Rs. 1,20,00,000 (Grant)
	<u>Contact</u> : S Paramasivan
	<u>Start Date</u> : April 2000
	Completion Date: March 2001
	Key Partner: 2 Partner NGOs of Orissa State
	Key Words: community participation, hygiene promotion, rural sanitation, rural water supply, operation & maintenance

The Water and Environmental Sanitation Sector in India

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196

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An Indicative List of NGOs^{*} in Water and Environmental Sector in India

Andaman and Nicobar Islands

ANET - Andaman and Nicobar Environmental Team Port Blair, Andaman and Nicobar Harry V. Andrews Fax: 03192-328 38

Andhra Pradesh

Action Association for Rural and Tribal Development Rajahmundry, Andhra Pradesh M. Gurudutt Prasad Phone: (0883) 614 42 Fax: (0883) 684 49

ACTS - Action for Community Service Society Chittoor, Andhra Pradesh G. Dasaratha Reddy Phone: (08587) 572 97 Fax: (08587) 572 97

AWARE - Action for welfare and awakening in Rural environment Hyderabad, Andhra Pradesh P.K.S. Madhavan Phone: (040) 236 311

BCT - Bhagavatula Charitable Trust Visakhapatnam, Andhra Pradesh B.V. Parmeswara Rao Phone: (0891) 604 43, 639 94

CIRD - Centre for Integrated Rural Development Secunderabad, Andhra Pradesh Sree Hari Naidu Phone: (040) 801 084

DDS - Deccan Development Society

Hyderabad, Andhra Pradesh V. Rukmini Rao Phone: (040) 322 2867 Fax: (040) 322 2260 E-mail: ddshyd@hd1.vsnl.net.in

Environment Protection Centre Hyderabad, Andhra Pradesh Jasraj Shrishrimal Phone: (040) 461 2398 Fax: (040) 594 578

Ground Water Investigation and Farmers Training Society Anantapur, Andhra Pradesh Suresh Anantham Phone: (08554) 452 08

Grameena Vikas Samiti

Tirupati, Andhra Pradesh L. Surya Narayana Reddy Phone: (08574) 265 94 Fax: (08574) 265 94

MVF - M Venkatarangalya Foundation

28 Road No 1, West Meerdapally, Near East Meerdapally, Secunderabad, Hyderabad - 500 026 Andhra Pradesh R Venkat Reddy, Coordinator Phone: (040) 780 1320 Fax: (040) 780 8808

Population and Environmental Education Centre Kurnool, Andhra Pradesh R. Ratna Swamy Phone: (08518) 850 42

Rural Development Trust

Bangalore Highway, Anantapur - 515, Andhra Pradesh Father Vincent Ferrer, Programme Director Phone: (08554) 315 03, 316 27 Fax: (08554) 323 27, 321 47

YCO - Youth Charitable Organisation Visakhapatnam, Andhra Pradesh M.S.R. Prem Kumar Phone: (08924) 311 22 Fax: (08924) 312 31

<u>Bihar</u>

ADITHI

2/30, State Bank Colony - II Bailey Road, Patna - 800 014, Bihar Ms. Viji Srinivasan Phone: (0612) 283 018 Fax: (0612) 283 018

Auranga Gramin Vikas Samiti Palamau, Bihar Bhola Prasad

BIRSA - Bindrai Institute for Research, Study and Action West Singhbhum, Bihar Devendranath Hasda Phone: (6582) 524 16 Fax: (06582) 52013

Gramin Vikas Parishad Deoghar, Bihar J.B. Ram Phone: (06432) 224 89

This is just an indicative list of NGOs and is not intended to be comprehensive.

An inclusion in this list does not constitute any endorsement from any donor (including DFID) or development agency. The names & addresses of NGOs given here may not all be correct, as they have been compiled from already available data.

<u>Delhi</u>

AFPRO - Action for Food Production 25/1A, D-Block, Pankha Road Institutional Area, Janakpuri, New Delhi - 110 058 Phone: (011) 555 5412, 555 3652, 559 2456 Fax: (011) 550 0343 E-mail: afpro@vsnl.com

A-ONE - Association of Organisations on Nature and Environment

A-15, Paryavaran Complex, South Saket Maidan Garhi Road New Delhi - 110 030 Priya Ranjan Trivedi Phone: (011) 652 5053, 686 5084 Fax: (011) 696 7514 E-mail: ecology@ecology.edu

Asian & Pacific Centre for Transfer of Technology

Opp. New Mehrauli Road, Qutab Institutional Area, POBOX 4575, New Delhi - 110 016 Jurgen Bischoff Phone: (011) 685 6276 Fax: (011) 685 6274

ASK - Association for Stimulating Know How

C-83, Lajpat Nagar-I, New Delhi - 110 024 Aqueel Khan, Director Phone: (011) 631 3925, 631 7655 Fax: (011) 631 3925 E-mail: askindia@ndf.vsnl.net.in

Centre for Improvement of Rural Environment B-5, Defence Colony New Delhi - 110 024 K.T.J.S. Chhatwal, Chairman Phone: (011) 462 4913

Centre for Science & Environment 41,Tughlakabad Institutional Area, New Delhi - 110 062 Usha Sekhar Phone: (011) 608 1110 Fax: (011) 608 5879

Conservation Society Delhi New Delhi Madhu Bajpai Phone: (011) 668 118

Development Alternatives

B-32, TARA Crescent, Qutab Institutional Area, New Delhi-110016, India Siddappa Phone: (011) 696 7938, 685 1158 Fax: (011) 686 6031 E-mail: tara@sdalt.ernet.in

Disha Society for Rural & Urban Community Development

13/88, C-4/B Janak Puri New Delhi - 110 058 Shobhna Radhakrishna Phone: (011) 555 4530 Fax: (011) 552 9118 E-mail: dishai@bol.net.in

Development Research and

Action Group 74, Paschimi Marg, Vasant Vihar New Delhi - 110 057 Dr Gautam Vohra Phone: (011) 614 2383 Fax: (011) 614 4146

ICID - International Commission on Irrigation and Drainage 48, Nyaya Marg, Chanakya Puri

New Delhi 110 021 K N Sharma Phone: (011) 611 5679, 611 6837 Fax: (011) 611 5962 E-mail: icid@icid.org PRADAN - Professional Assistance for Development Action 3, Community Shopping Centre , Niti Bagh, New Delhi 110 048 Achintya Ghosh Phone: (011) 651 8619, 651 4682 Fax: (011) 651 8619

E-mail: pradanho@ndb.vsnl.net.in

Participatory Research In Asia (PRIA) 42, Tuglakabad Institutional Area, New Delhi - 110 062 Dr Rajesh Tandon Phone: (011) 608 9559, 608 1908 Fax: (011) 608 0183 E-mail: info@pria.org

SPWD - Society for Promotion of Wastelands Development Sriram Bahratiya Kala Kendra Building, Opp. Mandi House, Sikandra Road, New Delhi S S Rizvi

Sulabh International Social Service Organisation of New Delhi Sulabh Bhawan, Mahabir Enclave, Palam Dabri Road, New Delhi - 110 045 Dr Bindeshwar Pathak Phone: (011) 503 2617, 503 2654, 503 2631 Fax: (011) 503 4014

Tata Energy Research Institute Darbari Seth Block, Habitat Place, Lodhi Road, New Delhi - 110 003 Ms. Nivedita Phone: (011) 462 2246, 460 1550 Fax: (011) 462 1770

<u>Gujarat</u>

Abhikram

Gujarat Lok Samiti Premises, Lal Darwaza, Ahmedabad – 380 001, Gujarat Mahadev Vidrohi Phone: (079) 550 7296, 755 7199 Fax: (079) 755 7199

AKRSP-I - Aga Khan Rural Support Programme (India) Ahmedabad, Gujarat Liza Thomas Phone: (079) 642 7029, 642 705, 642 7729 Fax: (079) 642 0864

ANA - Anand Niketan Ashram Vadodara, Gujarat Nagendra S. Patel Phone: 02669-73333, 73355 Fax: 73344, 0265-644444

Anumukti Sampoorna Kranti Vidyalaya Surat, Gujarat Surendra Gadekar Phone: (02625) 2074

ASAG - Ahmedabad Study Action Group Ahmedabad, Gujarat Rajesh Bhat Phone: (079) 550 7841 Fax: (079) 550 7842

Behavloural Science Centre Ahmedabad, Gujarat A.S. Pastakia Phone: (079) 464 928

Behaviouriai Science Centre of Gujarat St. Xavier's College, Ahmedabad, Gujarat - 380 009 Prasad M.Chacko Phone: (079) 464 928, 403 577 Fax: (079) 656 1845

CEE - Centre for Environment Education Ahmedabad, Gujarat Kartikeya V. Sarabhai Phone: (079) 644 2642, 644 2651 Fax: (079) 642 0242

CEMR - Centre for Ecodevelopment and Management Research Ahmedabad, Gujarat Gaurav Hirani Phone: (079) 674 5688 ESI - Environmental Sanitation Institute Ahmedabad, Gujarat Padmashri Ishwarbhai Patel Phone: (079) 755 7702, 755 6247 Fax: (079) 755 8052

Lok Bharati Bhavnagar, Gujarat Arunkumar M. Dave Phone: 02846-83322

Lok Vidyalaya, Valukad Bhavnagar, Gujarat Nanubhai M. Shiroya Phone: (02848) 8344

Manaviya Technology Forum 25 B, Gokulnagar Sindhi Society, Manjalpur Road, Vadodara, Gujarat Ashok Rathi Phone: (0265) 433 537

N.M. Sadguru Water and Development Foundation Dahod, Gujarat Mr. Harnath Jagawat Phone: (02673) 202 15 Fax: (02673) 307 49

Sadvichar Parivar Ahmedabad, Gujarat Harilal V. Panchal Phone: (079) 658 5260, 658 5290 Fax: (079) 658 5423

SARTHI - Social Action for Rural and Tribal Inhabitants of India Panchamahal, Gujarat Giriraj Singh Phone: (02674) 393 06

Sarvodaya Parivar Trust Valsad, Gujarat Kanti Shah Vikram Sarabhal Centre for Development Interaction Ahmedabad, Gujarat G. Raju Phone: (079) 442 642, 442 651 Fax: (079) 420 242

<u>Haryana</u>

Rural Initiative And Technology Impact Rahuka P O, Indri, Gurgaon, Haryana - 123 104 Mr S M Parija, President Phone: (01272) 387 600

Bhartiya Gram Sudhar Sabha 228/29 Ram Gopal Colony, Sonepat Road, Rohtak, Haryana - 124 001 Mr Devendra Hooda, President Phone: (01262) 546 61

Chaubisee Vikas Sangh, Meham Near Chaubisee Ka Chabutra, Mehmam Tehsil, Rohtak District, Haryana Dr Jasphool Singh, President Phone: (01257) 332 86 Fax: (01262) 506 56 E-mail: Jashool@del2.vsnl.net.in

(DVK) Dehat Vikas Kendra Village & Post Dongra Ahir, Mahendragarh District, Haryana - 123 021 Mr Mahabir Prasad, Director Phone: (01285) 6719

Himachal Pradesh

Lok Kalyan Mandal P O Theog, Shimla District - 171 201 Mr P R Ramesh, Executive Director Phone: (017837) 225 50, 372 38 Fax: (01783) 375 00

People-s Association for Himalaya Area Research Parikrama - Talla Danda, Nainital - 263 002 Mr Shekhar Pathak

Society of Appeal for Vanishing Environments

Post Box 5 Bhimtal, Nainital District - 263 136 Mr Fredrick Smetacek (Jr), Chief Coordinator Phone: (05946) 470 43

Society for Integrated Development of Himalayas

Hazelwood Cottage, Post Box No. 19, Landour Cantt. Mussourie District - 248 179 Mr Pawan K Gupta, Executive Director Phone: (0135) 632 904, 631 304 Fax: (0135) 631 304 E-mail: sidhsri@nde.vsnl.net.in

<u>Karnataka</u>

(AWDMS) Action for Water

Development Mysore Society 12, Sampangiramaswami Temple Street, Bangalore - 560 052 Major S R David, Administrative Officer Phone: (080) 226 0849

CESDI-Center for Environment and Sustainable Development India

C/O House No.8, UTC Quarters, 15 Harris Road, Benson Town, Bangalore – 560 046 George Cheriyan Phone: (080) 353 2513 Fax: 1-801-905-3531 E-mail: cesdi@satyam.net.in

AME - Agriculture, Man and Ecology

PO Box No 7836 368 'Sneha' IV Cross III Phase J P Nagar Bangalore - 560 078 Edith Van Walsum, Project Team Leader Phone: (080) 664 2835, 642 303 Fax: (080) 665 3471

Bangalore Environment Trust 166, Langford Road

Bangalore - 560 025 Govardhan, Administrator Phone: (080) 222 5515

Bangalore Support Group

153, V Main IV Block, Banashankari III, Stage II Phase, Bangalore - 560 085 Secretary Phone: (080) 661 4855 Fax: (080) 226 2571 .E-mail: esg@bgl.vsnl.net.in

Centre for Environment Education

Kamala Mansion, 143, Infantry Road Bangalore - 560 001 Director Phone: (080) 286 9094 Fax: (080) 286 8209

Compassion Unlimited Plus Action

257, I Cross HAL II Stage, Indiranagar Bangalore - 560 038 Suparna Bakshi - Ganguly Phone: (080) 225 8769, 525 8429 Fax: (080) 558 7172 E-mail: zarir@giasbg01.vsnl.net.in

East West Education Trust

1 B P Wadia Road, Bangalore - 560 004 Sophia TenBreock Phone: (080) 667 2498

Environment Support Group

36, Reservoir Road, Basavanagudi Bangalore - 560 004 Leo F Saldanha, Co-ordinator Phone: (080) 665 7995, 672 2563 Fax: (080) 227 4699 E-mail: esg@bgl.vsnl.net.in

Environment Support Group Project

44, III Floor New Bamboo Bazar Road, Cantonment Bangalore - 560 051 Ranjan Rao Yerdoor Phone: (080) 551 4225, 554 8432 Fax: (080) 554 8432

Green Foundation

839, 23rd Main J P Nagar II Phase Bangalore - 560 078 Vanaja Ramprasad, Secretary Phone: (080) 663 5963 Fax: (080) 663 1565 E-mail: nanditha@blr.vsnl.net.in

(IRRM) Indian Rural Reconstruction Movement

506, 9th Main 4th Cross, HAL 2nd Stage, Indiranagar, Bangalore - 560 008 Mr G N Reddi, President Phone: (080) 542 227

LIFE Environment Awareness Foundation 26-27, 9th Main Raj Mahal Vilas, Bangalore - 560 080 Mr K R Anand, Hony Secretary Phone: (080) 343 323

MYRADA

2, Service Road, Domlur Layout, Bangalore - 560 071 Mr Aloysius P Fernandez, Executive Director Phone: (080) 559 3166, 557 2028

<u>Kerala</u>

AVARD - Apex Voluntary Agency for Rural Development AVARD Bhavan, P.O. Chalakkudy, Thrissur - 680307 Fr. James Pazhayattil Phone: (0488) 842 964, 847 964

(AWAKE) - Association for Welfare Action in Kerala Environment 'Paroor' P O Thrikkariyoor, Ernakulum - 686 692 Mr Paroor Sreedharan, Director of Projects

Changanacherry Social Service Society P.B. No. 20, Arch Bishop House, Changanacherry, Kottayam - 686 101 Fr. Jose P. Kottaram Phone: (0482) 420 345, 422 540

Welfare Services Ernakulam Ponnurunni, P.O. Vyttila, Kochi, Ernakulam - 682 019 Arch Bishop Marvarkey Vithayathil Phone: (0484) 344 243 Fax: (0484) 347 829

Madhya Pradesh

Centre for Environment Protection, Research and Development

2/2, Asha Kiran Apt. Chain Singh Ka Bagicha, New Palasia, Indore - 452 001 Sudhir Misra, Managing Trustee and Secretary Phone: (0731) 538 908 Fax: (0731) 432 909

Environment Protection Group

163 Jail Road, Indore - 452 007 Mr Neelmadhav Bhusari, Advisor Phone: (0731) 531 141 Environmental Techniques India 236 B, Sangam Nagar, Kila Maidan, Indore - 452 006 Dr M K Misra, Chief Advisor Phone: (0731) 413 126, 444 210

Gramin Vikas Evam Paryavaran Sanstha Village Bagadi - Boroda, Post: Udawala, via Sainthal, Dausa District - 303 507 Mr Hari Shankar Sharma, Secretary

JPM - Jan Paryavaran Manch 6-A, Sneh Nagar, Indore - 452001 Dr Lata Bhattacharya, Chairman Phone: (0731) 479 402

Lok Biradri Trust 402, Ishan Apartment, 13/2 Snehlataganj, Indore - 452 003 Mr Tapan Kumar, Secretary Phone: (0731) 434 972, 434 934

NCHSE - National Centre for Human Settlements and Environment E-5 / A Girish Kunj, Arera Colony, Bhopal - 462 016 Mr R R Nigoskar, Director General Phone: (0755) 563 731, 565 306 Fax: (0755) 565 651

<u>Maharashtra</u>

ACIL - Navsarjan Rural Development Foundation 117, Baldota Bhavan, 6th Floor, Maharshi Karve Marg, Churchgate, Mumbai - 400 020 A R Shah Phone: (022) 292 059

AFARM - Action for Agricultural Renewal In Maharashtra Bldg No. 2/23, A-B Raisoni Park, Marketyard, Pune - 411 037 M N Kondhalkar Phone: (020) 464 641, 468 302 Fax: (020) 466 303

Annapurna Mahila Mandal

Block No. 10, Nauhit Building, 3rd floor 125, Ram Maruti Road, Dadar (W), Mumbai – 400 028 Mrs. Prema Purao, Hony. Secretary Phone: (022) 430 4474

Appa Patwardhan Safal & Paryavaran Tantraniketan Village Dehu, Haveli Taluk, Pune District - 412 109 S V Mapuskar

Appropriate Rural Technology Institute Flat No. 11, Maninee Apartments, Survey No. 13, Dhayarigaon, Tal: Haveli, Pune District President

Balf Development Research Foundation BAIF Bhavan, Dr. Manibhai Desai Nagar, Mumbai - Bangalore Bye-Pass Highway, Warje, Pune - 411 029 N G Hegde Phone: (020) 365 494, 365 496, 369 955 Fax: (020) 366 788

Bharati Vidyapeeth Institute of Environment Education & Research Katraj, Dhankawadi Pune, Satara Road, Pune - 411043, Maharashtra Dr Erach Bharucha, Director Phone: (020) 525 684, 636 602 Fax: (020) 539 121 E-mail: bvieer@bom3.vsnl.net.in

Bhimashankar Prakalp P.O. Manchar, Pune - 410 503 Kusum Karnik

Bombay Environmental Action Group 4 Kurla Industrial Estate, LBS Marg, Ghatkopar West, Mumbai – 400 086 Saad Ali Phone: (022) 514 7574 Fax: (022) 511 5810 E-mail: debi@beag.net

Centre for Application of Science and Technology for Rural Development 6 Koyna Apartments, Survey No. 133, Kothrud, Pune - 411 029 A D Karve Phone: (020) 342 217 Fax: (020) 331 250

DROP - Development through Resource Organization Planning 4, Godavari Apartments, 6/2, Eran Dalane, Pune - 411 004 Mr Ajeet Oak, Secretary Phone: (020) 331 430 Fax: (020) 331 250 E-mail: drop@pune.dartmail.dartnet.com

Ecological Society

1 B Abhimanshree Society, Pashan Road, Pune - 411 008 Prakash Gole Phone: (020) 350 408

JBF - Jamnalal Bajaj Foundation Bajaj Bhawan, 2nd Floor, Nariman Point, Bombay - 400 021 Sumitra Agnihotri, Asst. Manager Phone: (022) 284 2110

LHWRF - Lupin Human Welfare & Research Foundation Lupin Laboratories Limited, 159, C S T Roa, Kalina, Santacruz (E), Mumbai - 400 098 Bhupat Trivedi Phone: (022) 612 4050, 612 7162

National Association of Water Resources Development Agencies

Y M C A Compound, 6 Arjun Marg, Pune - 411 001 Yugandhar Mandavkar Phone: (020) 660 596 Fax: C/o C T O 212-623679

NEEDS - National Environment and Ecology Defence Society Nhava House, 65 Maharishi Karve Road, Mumbai - 400 002 M K Ahmed Phone: (022) 252 378

ODRON - Organisation for Development and Research of National Wealth C/o B.S. Mate 651 Pulachi Wadi, Behind Deccan Gymkhana Bus Stand, Pune - 411 004 President Phone: (020) 589 46

Research and Action in Natural Wealth Administration 16 - Swastishree Society, Ganeshnagar, Pune - 411 052 Bhushan Sathe Phone: (020) 364 218, 420 625 Fax: (020) 482 212

Rural Agricultural Institute, Naryangaon Post: Narayangaon, Junnar Taluk, Pune District - 410 504 K L Meher

Save Bombay Committee 620 Jame Jamshed Road, Dadar (E), Mumbai - 400 014 Kisan Mehta Phone: (022) 414 9688 Fax: (020) 415 5536

Society for Clean Environment Garden Resort, 606 Sion-Trombay Road, Chembur, Mumbai 400 071 Dr. T.N Mahadevan, General Secretary Phone: (022) 414 2862

The Soonabal Pirojsha Godrej Foundation (Environmental Cell) Godrej Bhavan, 4-A Homi Street, Mumbai - 400 001 Jer K Bardi UDI - Urban Development Institute 73A-Mittal Tower, Nariman Point, Mumbai - 400021 Rashmi Mayur Phone: (022) 204 5758

VANARAI

Aditya Residency, 498 Parvati, Pune - 411009 Jimmy Rajadhyaksha Phone: (020) 540 351, 549 351 Fax: (020) 545 299

Watershed Organisation Trust

Behind Market Yard, Near Social Centre, Ahmednagar, Maharashtra - 414 001 Crispino Lobo Phone: (0241) 356 188, 343 312 Fax: (0241) 341 134

<u>Mizoram</u>

Association for Rural Development Lamsang, P O Lamsang, Imphal - 795 146 Mr N Arjun Singh, Secretary

<u>Orissa</u>

Agragamee

At / P.O. Kashipur, Rayagada – 765 015 Mr Achyut Das, Director Phone: (06856) 225 16 Fax: (06856) 225 16 Email: achyut@agragami.unv.ernet.in

ASSA - Associated Social Service Agency

Sailongchhak, Anandapur, Keonjhar District - 758 015 Mr Babun Mohanty, Director Phone: (06731) 201 93

Bhagwati Environment and Development Institute Police Housing Colony ,Tiruchirapalli Road, Dindigul - 624 009 Mr J Paul Baskar, Chairman Phone: (0451) 320 21

Centre for Environmental Research and Extension Education

10 Bapuji Nagar, Near Medical College, Berhampur, Ganjam District - 760 004 Mr K Milan Kumar Patro, Director

GITA - Gandhian Institute of Technical Advancement

Duplex-42 (7 acres) Phase - I, Chandrasekharput Housing Board, Bhubaneswar - 751 016 Mr Prashant Kumar Mishra, Chief Executive

Gram Vikas

P.O. Mohuda, Via Berhampur, Ganjam District - 760002 Mr Joe Madiath, Executive Director Phone: (0680) 209 755 - 63 Fax: (0680) 209 754

OBPP - Orissa Bigyan Prasar Parishad

R C Das Lane Kamapally, P.O. Berhampur, Ganjam District - 760 004 Dr Satyanarayan Dash, General Secretary Phone: (06812) 701 87

OES - Orissa Environmental Society

B-3, I R C Village, Nayapalli, Bhubaneswar - 751 015 Mr Sundara Narayana Patro, Secretary Phone: (0674) 574 23, 411 979

People's Rural Education Movement

Aandiapalli - Rangailunda (PO), Bhanja Vihar, Berhampur r Jacob Thundyle, President Phone: (06812) 282 266 Fax: 200111 E-mail: prem@unv.ernet.in

<u>Punjab</u>

Bharat Jan Gyan Vigyan Jatha

139, R, Kitchlu Nagar, Ludhiana - 141 001 Dr Arun Mitra, General Secretary Phone: (0161) 470 252, 446 906 Fax: (0161) 440 204

Phagwara Environment Association Public Eye Hospital, Railway Road, Phagwara, Punjab 144 401 Dr. Amarjit Chaucer Phone: (01824) 602 05 Fax: (01824) 633 94

<u>Rajasthan</u>

Alok Nav Yuvak Mandal Village & P O Majawada, Vallabhanagar Tehsil, Udaipur District - 313 602 Mr Chandra Prakash Chobisa, Secretary

Aravali Volunteers Society Rajasthan Kherwara, Udaipur - 313 803 Mr S K Yusufzai, Coordinator Phone: (02907) 202 28, 200 91

Centre for Rural Development and Consultants Society (CRDC) Plot No. 6, Shiv Colony, Behind Petrol Pump Thana Circle, Sanganer, Rajasthan Mr. Sukhpal Dhabai, Chief Functionery Phone: (0141) 581 643

Gram Bharati Samiti Amber Bhawan, Amber, Jaipur - 303 101 Mr Bhawani Shankar Kusum, Secretary Phone: (0141) 530 268 Fax: (0141) 530 719

Gramin Vikas Vigyan Samiti (GVVS)

458, Milk Men Colony, Lane No 3, Pal Road, Jodhpur - 342 008 Ms Shashi Tyagi, Secretary Phone: (0291) 744 549 Fax: (0291) 744 549

Grama Reconstruction and Extensive Action Trust

Naga Manickam Illom, Meenatchipuram Natham, Dindigul - 624 401 Mr A Jeyasakthivel, Managing Trustee

Green Earth Foundation

C-141, A Mahavir Marg, Malviya Nagar, Jaipur - 302 018 Dr K P Sharma, Chairman

Gyan Bharatl Trust

46, Gokul Nagar, Udaipur - 313 001 Dr R C Mehta, Managing Trustee Phone: (0294) 414 738, 410 811

Institute Of Environment Management & Sustainable Development

10/35 Chopasni Housing Board, Nandan Van PO, Jodhpur - 342 008, Rajasthan Dr Mrs Hemlata Gaur Phone: (0291) 754 947, 754 406 Fax: (0291) 438 691 (Pp.) Email: iemsd@satyam.net.in

MMVS - Magra Mewar Vikas Sanstha

Village Kalatkhera, P O Devata, Ajmer District - 305 922 Mr D A Acharya, President Phone: (01462) 228 49 Fax: (01462) 205 53

Paryavaran Prachar Samiti, Kota

33-C, Instrumentation Township, Kota - 324 005 Mr K K Sharma, Chairman

Paryavaran Parishad (PP)

2 KA, 2 Vigyan Nagar, Kota - 324 005 Dr Laxmi Kant Dadhich, Chairman Phone: (0744) 426 449 Fax: (0744) 421 108 E-mail: ambarish@jp1.vsnl.net.in

Rajasthan Environment Preservation Society

Vasundhara- Tonk Road, Jaipur - 302 015 Ms Sudha Raina, President

Sajeev Seva Samiti

Kanak Nikhunj, Jasraj Marg, 475, Bhupalpura, Udaipur - 313 001 Mr Shanti Lal Bhandari, Chief Functionary Phone: (0294) 412 538 Samajik Aarthik Vikas Samiti Village New Ralawata, P O Garudwasi, Chaksu, Jaipur - 303 901 Ram Prasad Meena, President Phone: (014294) 443 76

Seva Mandir

Old Fatehpura, Udaipur - 313 001 Mr Ajay S Mehta, Chief Executive Phone: (0294) 560 951, 560 047 Fax: (0294) 560 047

Tarun Bharat Sangh

Bhikampura, P O Kishori, Thanagazi Tehsil, Alwar - 301 022 Mr Rajendra Singhm General Secretary Phone: (014652) 250 43

Udalpur Environmental Group

P N 206, Road 13, Ashok Nagar, Udaipur - 313 001 Mr L L Sharma, President

<u>Tamil Nadu</u>

Ramanujam Foundation for Agriculture and Human Potential Development 94, Bhaskar Colony, Chennai - 600 092 Dr K M Ramanujam, Chairman Phone: (044) 480 2881

C.P.R. Environmental Education Centre No 1, Eldams Road, Alwarpet, Chennai - 600 018 Dr Nanditha C Krishna, Director Phone: (044) 433 7023, 434 6526 Fax: (044) 432 0756 E-mail: cpreec@vsnl.com

League for Integrated Growth of Hill Tribes Trust

1/4, David Colony, Simco Meter Factory Road, Tiruchirapalli - 620 021 K Govindan, Project Director Phone: (0431) 457 130

Development Promotion Group

49-A, & 52, Josier Street, Nungambakkam, Chennai - 600 034 Mr R Bhakther Solomon, Society Secretary Phone: (044) 825 660, 827 2180 Fax: (044) 472 1042

ECG - Environmental Conservation Group 122/6, Acchukatti, Thoppu Salai Road, Woriyur, Tiruchirapalli - 620 003 Mr S M Sheriff, Executive Director Phone: (04332) 767 760

Environmental Toxicology Information Centre

Department of Pharmacology and Environmental Toxicology, Dr ALM PG Institute of Basic Medical Sciences University of Madras, Taramani, Chennai - 600 013 Mr P Muthu, General Secretary Phone: (044) 413 761, 412 997

Gramodaya

Post Box 6, Manaparai, Tiruchirapalli District - 621 306 Dr M L E Manoharan, Director Phone: (04332) 606 30 Fax: (04332) 600 70

Uttar Pradesh

ABGVS - Akhil Bhartiya Gramin Vikas Sansthan Sokhana, Via Hathras, Aligarh District, Pin - 204 101 Mr D P Singh, General Secretary

AES - Academy of Environmental Sciences C-30, Shastri Nagar, Meerut - 250 004 Dr V P Kudesia, Secretary Phone: (0121) 762026 Appropriate Technologies - India Ukimath, District Rudraprayag, Garhwal, Uttar Pradesh Mr. Mukul Prakash - Program Manager Phone: (01364) 6415, 6421 Fax: (0135) 657 748, 658 730

ATDA - Appropriate Technology Development Association

Post Box 311, Gandhi Bhavan, Lucknow - 226 001 Mr M M Hoda, General Secretary Phone: (0522) 221 427, 213 506 Fax: (0522) 221 427

Gorakhpur Environmental Action Group

224, Purdilpur MG College Road, Gorakhpur - 273 001 Dr Shiraz A Wajih, Secretary Phone: (0551) 334 906, 339 774 Fax: (0551) 339 774

Gramya Vikas Sansthan

E-10, Kurmanchal Nagar, Lucknow Bharat Singh Bisht, Secretary Phone: (0522) 348 060

Indian Society of Environment

7/183, Swarup Nagar, Kanpur - 208 002 Dr P K Mathur, General Secretary Phone: (0512) 214 797, 314 919

National Environmental Conservation Association

Centre for Advanced study in Botany, Banaras Hindu University, Varanasi - 221 005 Mr B D Tripathi, President Phone: (0542) 311 190, 330 454

Society for Environmental Pollution Control 17/423, New Hyderabad, Lucknow - 226 007 Mr A Quraishy, President Phone: (0522) 387 252, 327 547 Fax: (0522) 388 610

Swachchha Ganga Mahila Samitee D-59/03A, Sigra, Varanasi - 221 002 Ms Anjana Prakash, Secretary Phone: (0542) 221 199 Fax: (0542) 239 172

West Bengal

Agragati Village Kalikata, P O Rashpur, Howrah District - 711 401 Mr Tapan Mandal, Secretary Phone: (033) 650 3758

Balitikuri Bikash Bhaban

P O Balitikuri, Howrah District - 711 402 Mr Santi Chakraborty, Secretary

Belari Samaj Kalyan Samity

Village & P O Belari, Via Uluberia, Howrah District - 711 315 Mr Md. Janab Ali, Secretary

Center for Study of Man and Environment

CK-11, Sector - 2, Salt Lake City, Calcutta - 700 091 Mr A B Biswas, Hony. Secretary Phone: (033) 359 0781, 358 2589 Fax: (033) 337 6290 Forum for the Advancement of Inter Disciplinary Study 11 U, Jhil Road, (Ground Floor), Newlands, Calcutta - 700 031 Prof Dilip Bose, Coordinator

IDMACONSER - International Data Management Consultancy on Environmental and Socio-economic Resources Block 10, Flat 4, 131, Netaji Subhas Chandra Bose Road, Calcutta - 700 040. Mr A B Chaudhuri, Chief Consultant Phone: (033) 471 6734

IPHE - Institution of Public Health Engineers India IPHE Building, CK 58 Salt Lake, Calcutta - 700 091 Mr Sisir Kumar Neogi, Secretary General Phone: (033) 337 8678 Fax: (033) 337 6290

Liberal Association for Movement of People 66, Surya Sen Street, Calcutta - 700 009 Mr Malay Dewanji, General Secretary Phone: (033) 241 8496, 31146 Fax: (033) 241 7469 Rural Development Consortium BF - 45, Salt Lake City, Sector I, Calcutta - 700 064 Mr Pratip Kr Pande, Director Phone: (033) 337 5930 Fax: (033) 554 7205

UNNAYAN

36/1A, Garcha Road, Calcutta - 700 019 Mr Arun Deb, Coordinator Phone: (033) 475 0162

Vivekananda Nidhi and the Institute of Value Orientation and Environmental Education 149/IE Rashbehari Avenue, First Floor, Calcutta - 700 029 Mr R K Bhattacharya, Trustee Phone: (033) 464 3766, 247 4813, 652 2442 Fax: (033) 464 2730

Note: If you want to nominate an NGO for inclusion in this directory, please send the details by post to Convenor (Water Team), DFID (India). The details of the NGO may be included in the next edition of this directory.

Please mail any corrections/additions to the details provided here to the Convenor (Water Team), DFID (India).

Some Water and Environmental Sanitation Sites

WWW.UNEP.org

www.wsp.org Official site of the Water and Sanitation Programme.

www.awra.org Officical site of 'American Water Resources Association'

www.un.org/est/sustdev/ Site of the United Nations Division for Sustainable Development

www.lnweh.unu.edu/unulnweh/

The International Network on Water, Environment and Health (INWEH) is a new member of the UN university (UNU) family of organisations created in 1996.

www.who.int/water_sanitation_health/environmental_sanit/ envindex.htm Official site of the World Health Organization

www.envirolink.netforchange.com 'Envirolink Network', the online environmental community's site

www.edie.cprost.sfu.ca

Hosted by the 'Global Childnet', the site covers water and environmental sanitation issues from a 'child health' perspective.

info.lut.ac/departments/cv/wedc/garnet

The site represents the internet presence of 'Global Applied Research Network'. The site is an initiative of WSSCC funded by DFID.

www.gwp.sida.se/www.gwpforum.org 'Global Water Partnership' (GWP) site

www.oleau.fr

Site of `The International Office for Water' (IOW), a non profit making association under the French law.

www.wedc.ac.uk

Site of "The Water, Engineering and Development Centre (WEDC)"

www.skat.ch/ws/ws.htm

Site of the 'Swiss Centre for Development Cooperation in Technology and Management' (SKAT), a leading Swiss Consultancy firm working internationally in the areas of 'Water and Sanitation, Architecture & Building, Transport Infrastructure and Urban Development.

www.waterald.org.uk

Site of WaterAid, UK's specialist development charity working through partner organisations to help poor people in developing countries achieve sustainable improvements in their quality of life by imporved domestic water supply, sanitation & associated hygience practices.

www.worldbank.org/html/fpd/water

Offical site of The World Bank

www.wsscc.org/gesi

Siet of the `Global Environmental Sanitation Initiative' (GESI), a compaign of `Water Supply and Sanitation Collaborative Council C/o WHO, Geneva'. (WSSCC).

www.worldwaterforum.org

The site is a coverage of the `Second World Forum' & ministride conference held in Hague, The Netherland, from 17-22 Mar. 2000

www. WSSCC.org/interwater

The site professes to be the `Internet gateway to Water & Sanitation Information'.

www.unicef.org

Official site of UNICEF with a seperate coverage on `Water, Environment and Sanitation'

www.uwin.slu.edu

Universities Water Information Network (UWIN) disseminates Internet information to the Water resources community & all concerned with the water reserves.

www.widelfe.nl

`WL 1 Delft Hydraulics' is an independent consulting & research institute located in The Netherlands.

Water1.geol.upenn.edu This site informs about the activities of the Middle East Water Information Network (MEWIN).

www1.silsoe.cranfield.ac.uk/iwe Site of the `Institute of Water and Environment' of the Cranfield University (UK)

www.netc.wvu.edu

Site of `The National Environmental Training Centre for Small Communities (NETCSC).

www.epa.gov/ow

Site of the `Office of Water' of the `Environment Protection Agency'.

www.lrc.nl Site of the 'International Water & Sanitation Centre'

www.waterweb.org

This site represents the `Water Web Consortium' which has been created to promote the sharing of information concerning water and earth's environment.

www.worldwatercouncil.org

Wesite of the World Water Council.

www.adb.org

Site of the `Asian Development Bank', a leading funding agent in International Development with an india specific section www.adbindia.org.

www.africanwater.org

This is a site dedicated to the water sector in Africa.

www.waterwiser.org

Sponsored by the American Water Works Association, the site covers activities of both Private and Public organisations involved with `Water' in North America.

www.sandec.ch

Site of the Department of Water & Sanitation in Developing Countries at the Swiss Federal Institute for Environmental Science & Technology (EAWAG).

www.uesnet.org

Website of the 'Urban Environment Sanitation Network'.

www.fao.org

Some relevant information on WESS can be accessed on this official site of `Food & Agricultural Organization'.

www.ausald.gov.au

The official site of Australian Agency for International Development.

www.sanlgate.net

Sanitation connection is an Internet based resource that gives access to information on technology, institutions and financing of sanitation systems around the world.

www.enn.com

A news-based site sponsored by the Environment News Network.

www.actionaid.org

This official site of ActionAid covers among other things its interventions in WESS around the World.

www.wateronline.com

A vertical Net Community of Organisations/Individuals involved with Water related issues.

Further Reading

- 1. A.F. Ferguson & Co., 1992, Kerala Water Authority Cost and Revenue Study. Vol.II-B: Report on Household Field study.
- 2. Bagchi, Amaresh, et.al., 1992. State Finance in India.
- 3. Bengal State Finance Commission, 1995. Recommendations of State Finance Commission.
- 4. Briscoe, John and Harvey A. Garn, 1995. "Financing Water Supply and Sanitation under Agenda 21," in Natural Resource Forum 19 (1):59-70.
- 5. Datta, Abhijit, 1992. "Local Government Finances: Trends, Issues, and Reforms".
- 6. Ghosh et.al., 1995. Water Supply in Rural India.
- 7. Government of India, 1994a. Report of the Expert Committee on Rural Water Supply. New Delhi: Rajiv Gandhi National Drinking Water Mission, April.
- 8. Government of India, 1994b. Report on Validation Survey. New Delhi: Rajiv Gandhi National Drinking Waer Mission.

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- 9. Government of India 1994c. Survey Status Report. New Delhi: Rajiv Gandhi National Drinking Water Mission.
- 10. Government of India, 1994d. National Sample Survey on Consumer Expenditure 50th Round (1993-94). New Delhi: Department of Statistics, Ministry of Planning and Programme Implementation.
- 11. Government of India, 1994e. Report of the Tenth Finance Commission. Tenth Finance Commission.
- 12. Government of India, 1996. Draft Working Group Report on Rural Water Supply and Sanitation for the Formulation of Ninth Five-Year Plan. New Delhi: Rajiv Gandhi National Drinking Water Mission.
- 13. Government of India, 1996. Economic Survey 1995-96. New Delhi.
- 14. Government of India, 1996. Financial Aspects of Rural and Urban Water Supply Schemes. New Delhi: Central Water Commission. Report 4/96.
- 15. Government of India, 1996. Ninth Plan Report. New Delhi: Working Group for the Formulation of the Ninth Five-Year Plan.
- 16. Khatri, Rajkumar, 1994. "Integrated Rural Water and Environmental Sanitation Project, Karnataka. Project Study Report." Washington, DC: World Bank.
- 17. Kurt, K. Balachandra et. Al., 1996. "The Community-Managed Sanitation Program in Kerala. Learning from Experience." International Reference Centre and International Water and Sanitation Centre.
- 18. Narayan, 1995. "The contribution of People's Participation: Evidence from 121 Rural Water Supply Projects." Environmentally Sustainable Development Dept. Occasional Paper 1. Washington, DC: World Bank, Processed.
- 19. National Council of Applied Economic Research (vairous issues). Indian Makret Demographics.
- 20. Oommen M.A. et. Al., 1996. Panchayati Raj Development Report 1996. Delhi: Institute of Social Sciences.

- 21. Oommen, M.A., and Abhijit Datta, 1995. Panchayats and Their Finances. Delhi: Institute of Social Sciences
- 22. Pant, S.K., 1996. "Rural Water Supply and Sanitation: Case for Reorienting Approach to Key Issues."
- 23. Rivera, Daniel, 1996. "Private Sector Participation in the Water Supply and Wastewater Sector".
- 24. RWSG-SA/UNICEF. Integrated Sanitation Project Midnapur, CASELET 2 Dissemination Notes.
- 25. United Nations Development Programme, 1993. Hanuman Development Report. New York.
- 26. United Nations Development Programme, 1995. Development Cooperation-India 1995. New York.
- 27. West Bengal State Finance Commission, 1995. Recommendations of the State Finance Commission, West Bengal.
- 28. World Bank, 1994. "Annual Review of Portfolio Performance FY93." Washington, DC: World Bank, Transportation, Water, and Urban Development Department. Processed, April.
- 29. World Bank, 1996. Environment Department Dissemination Notes, No.48. Washington, DC. Processed, August.
- 30. World Bank, 1996a. India Country Economic Memorandum. Washington, DC.
- 31. World Bank, 1996b. The World Bank Participation Sourcebook, Washington, DC.
- 32. World Bank, 1998a. "Intersectoral Water Allocation, Planning and Management Report," under the India Water Resources management Sector Review Program. Washington, DC: World Bank, South Asia Rural Development Unit.
- 33. World Bank, 1998b. "Groundwater Regulation and Management Report," under the India Water Resources Management Sector Review Program. Washington, DC: World Bank, South Asia Rural Development Unit.

(Excerpts from Rural Water Supply and Sanitation; Ministry of Rural Areas and Employment and The World Bank, 1999, Allied Publishers Ltd.)

Index - keywords

С

- capacity building 67, 68, 69, 71, 74, 78, 79, 80, 81, 86, 93, 94, 95, 96, 97, 98, 99, 109, 114, 115, 116, 117, 120, 130, 131, 133, 141, 142, 143, 144, 149, 153, 159, 177, 180, 183
- community participation 69, 74, 75, 79, 80, 81, 86, 88, 89, 94, 96, 103, 112, 114, 115, 116, 117, 120, 121, 124, 130, 131, 132, 133, 146, 149, 154, 155, 165, 166, 167, 168, 169, 173, 177, 180, 183, 187, 192, 193, 194, 195
- cost recovery 67, 68, 69, 70, 71, 74, 75, 86, 124, 125, 126, 130. 131. 132. 137. 146. 173. 177. 183

D

demand assessment 69, 70, 71, 79, 80, 81, 88, 89, 105, 106, 107, 108, 109, 121, 131, 132, 137, 177, 183,

Ε

- environment 69, 70, 74, 75, 78, 79, 80, 81, 88, 89, 107, 112, 115, 120, 121, 124, 125, 126, 127, 131, 132, 133, 137, 141, 142, 143, 144, 146, 153, 154, 155, 159, 165, 172, 173, 177, 180, 187, 188 environmental health 69, 79, 80, 104, 108, 155, 120, 124, 125, 126,
 - 127, 141, 142, 143, 149, 155, 166, 167, 168, 169, 172, 187, 188, 189

G

- gender
 - 74, 75, 88, 89, 115, 116, 130, 131, 132, 137, 146, 149, 165, 166, 167, 168, 169, 183

Η

- health 71, 75, 86, 99, 105, 106, 107, 108, 120, 121, 165, 166, 167, 168, 169, 172, 187, 188
- hygiene promotion 69, 70, 71, 74, 75, 79, 80, 81, 86, 94, 99, 103, 104, 120, 121, 124, 130, 131, 132, 137, 143, 144, 146, 165, 166, 167, 168, 169, 172, 173, 177, 183, 187, 192, 193, 194, 195

Μ

management of service providers 68, 69, 71, 86, 109, 115, 125, 141, 142, 173, 193, 194

micro financing 70, 86, 88, 89, 143, 144, 165, 172

Ν

NGOS 70, 74, 75, 79, 80, 88, 89, 94, 95, 103, 104, 112, 115, 116, 117, 120, 121, 124, 130, 131, 132, 133, 141, 142, 143, 144, 149, 158, 159, 166, 167, 168, 169, 180, 183, 187

0

operation and maintenance 69, 70, 78, 79, 80, 81, 86, 95, 96, 98, 99, 103, 105, 106, 107, 108, 109, 121, 124, 125, 126, 130, 131, 132, 137, 141, 142, 146, 177, 180, 183, 188, 193, 194, 195

Ρ

```
policy reform
                         69, 70, 71, 74, 75, 96, 97, 99, 103, 112, 115, 116,
    117, 131, 132, 137, 141, 142, 146, 177, 183, 187, 193, 194
poverty
                         71, 74, 75, 86, 88, 89, 95, 96, 97, 99, 112, 117,
    120, 124, 125, 126, 141, 142, 166, 167, 168, 169, 172
private sector participation 68, 69, 71, 114, 125, 159, 173, 187
public sector reform 69, 74, 75, 132, 141, 142, 159
```

R

research 70, 74, 75, 78, 79, 80, 81, 88, 89, 104, 107, 108, 112, 114, 115, 116, 117, 120, 141, 142, 143, 149, 154, 155, 159, 177, 193 rural sanitation 86, 94, 98, 99, 103, 104, 121, 130, 131, 137, 146, 149, 149, 165, 166, 167, 168, 169, 177, 183, 188, 193, 194, 195,

rural water supply 78, 86, 94, 98, 99, 103, 104, 109, 114, 115, 116, 117, 121, 130, 131, 137, 146, 149, 165, 167, 168, 169, 177, 183, 188, 193, 194, 195

<u>S</u>

solid waste management 67, 68, 69, 71, 74, 75, 86, 95, 96, 98, 99, 103, 104, 108, 120, 132, 137, 141, 142, 143, 144, 165, 166, 167, 168, 169, 172, 173, 177, 183, 189

technical studies 69, 78, 80, 81, 88, 89, 106, 107, 108, 109, 112, 114, 115, 121, 124, 141, 142, 154, 159, 187, 188, 189, 193

transforming institutions 68, 71, 74, 75, 79, 80, 81, 86, 88, 89, 93, 94, 96, 98, 99, 109, 114, 115, 116, 117, 120, 121, 124, 131, 132, 137, 141, 142, 173, 177, 183, 193

U

- urban sanitation 67, 68, 69, 70, 71, 74, 75, 93, 94, 95, 96, 98, 99, 103, 104, 108, 120, 124, 125, 126, 127, 132, 142, 149, 172, 173, 177, 180, 188, 192
- urban water supply 67, 68, 69, 71, 74, 75, 93, 94, 95, 96, 98, 99, 104, 105, 106, 107, 108, 120, 126, 127, 142, 149, 177, 180, 188, 192

W

- water quality 74, 75, 79, 80, 81, 105, 106, 107, 108, 121, 124, 125, 126, 131, 137, 141, 142, 143, 144, 153, 154, 165, 166, 167, 168, 169, 187, 188
- water resources management 74, 75, 78, 79, 80, 81, 86, 96, 97, 99, 106, 112, 114, 115, 116, 117, 120, 121, 125, 131, 132, 133, 137, 141, 142, 143, 144, 149, 153, 154, 155, 158, 165, 166, 167, 168, 169

Index - states & UTs

National

А

Assam

В

68, 69, 71, 93, 94, 95, 98, 115, 120, 125, 126, 142, 143, 144, 146, 149, 159, 177, 187, 189

Μ

Madhya Pradesh

Maharashtra

Manipur Meghalaya Mizoram

Ν Nagaland

0 Orissa

Ρ Pondicherry Puniab

R Rajasthan

S Sikkim

Т Tamil Nadu

Tripura

U Uttar Pradesh

W West Bengal 99, 124, 162, 167 17, 22, 30, 41, 49, 57, 58, 104, 109, 120, 121, 127, 131, 132, 162, 168, 173, 180, 195 17. 22. 30. 41. 49. 79. 107. 108 17, 22, 30, 42, 50, 58, 75 17, 22, 30, 41, 49

17, 22, 30, 41, 49, 57, 58, 75, 89, 91, 97,

17, 22, 30, 42, 50

17, 22, 30, 42, 49, 79, 88, 91, 94, 95, 97, 103, 104, 108, 142, 144, 162, 168, 195

23, 43, 51, 58 17. 22. 30. 42. 50. 56

17, 22, 31, 42, 50, 58, 68, 78, 79, 97, 106, 117, 130, 132, 162, 168

17, 22, 31, 42, 50, 57, 74

17, 22, 31, 42, 50, 58, 83, 86, 89, 103, 115, 116, 154, 162, 169, 173, 180, 192, 193, 194 17, 22, 42, 50, 58

17, 22, 42, 51, 58, 103, 104, 153, 162, 169, 172, 181, 183

18, 23, 43, 51, 57, 71, 91, 94, 97, 108, 124, 130, 132, 162, 169

Bihar С Chandigarh

Andhra Pradesh

Arunachal Pradesh

D Dadar & Nagar Haveli

Daman and Diu Delhi

G

Goa Gujarat

Η

Harvana Himachal Pradesh

L Jammu & Kashmir

Κ Karnataka

Kerala

L

Lakshadweep Islands

Andaman & Nicobar Islands 18, 21, 43, 47, 57 16, 21, 29, 40, 47, 91, 96, 99, 104, 107, 115, 133, 135, 137, 162, 165, 173, 177, 192, 193, 194 16, 21, 29, 40, 47, 58 16, 21, 29, 40, 47, 166

16, 21, 29, 40, 48, 97, 162, 166

23, 43, 52, 56

18, 23, 43, 52, 57, 58 23, 51, 57 43, 51, 58, 69, 70, 71, 103, 10, 124, 153, 154, 158

16, 21, 29, 40, 48, 56 16, 21, 29, 40, 48, 57, 97, 106, 116, 135, 137, 155, 162, 166, 172, 173

16, 21, 29, 41, 48, 56, 124 16, 21, 29, 41, 48, 57, 58, 120, 121, 141, 143

16, 21, 29, 41, 48, 57

16, 21, 30, 41, 49, 56, 67, 68, 69, 74, 78, 79, 83, 86, 88, 95, 96, 104, 106, 126, 135, 142, 143, 154, 167, 181, 183, 192, 194 17, 21, 30, 41, 49, 57, 79, 125, 126, 137, 167, 173, 177, 182, 183

23, 43, 51, 57, 79

211_

Department For International Development

The Department for International Development (DFID) is the British Government department responsible for promoting development and the reduction of poverty. The government elected in May 1997 increased its commitment to development by strengthening the department and increasing its budget.

The policy of the government was set out in the White Paper on International Development, published in November 1997. The central focus of the policy is a commitment to the internationally agreed target to halve the proportion of people living in extreme poverty by 2015, together with the associated targets including basic health care provision and universal access to primary education by the same date.

DFID seeks to work in partnership with governments which are committed to the international targets, and also seeks to work with business, civil society and the research community to encourage progress which will help reduce poverty. We also work with multilateral institutions including the world bank, UN agencies and the European Commission. The bulk of our assistance is concentrated on the poorest countries in Asia and Sub-Saharan Africa.

We are also contributing to poverty elimination in middle income countries and helping the transition countries in Central and Eastern Europe to enable the widest number of people to benefit from the process of change.

As well as its headquarters in London and East Kilbride, DFID has offices in New Delhi, Bangkok, Nairobi, Harare, Pretoria, Dhaka, Suva and Bridgetown. In other parts of the world, DFID works through staff based in British Embassies and High Commissions.



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