

822 IN94

Library

IRC
#1001
Tel: +31 (0) 20 674 2001
Fax: +31 (0) 20 674 2004

**The UNICEF Assisted
Government of India
Rural Water Supply and
Environmental Sanitation Programme**

**Programme Overview
and Funding Appeal**

15 March 1994

unicef



United Nations Children's Fund - India Country Office
Water and Environmental Sanitation Section

822 -IN94-14949

Abstract

UNICEF has a twenty-five year history of cooperation with the Government of India in the Rural Water Supply and Environmental Sanitation Sector. Although UNICEF's contribution in monetary terms is only a relatively small proportion of overall government allocation to the sector, it has achieved a significant impact over the years in the areas of low cost community managed technologies and the empowerment of women as agents of change; research and development leading to the demonstration of replicable models and indigenous manufacturing capacity; and a more comprehensive and flexible rural sanitation programme.

UNICEF contributes to the Government of India 8th Five Year Plan through a "Plan of Operations" for the 1991-1995 period. A funding level of US\$ 78 million of which US\$ 64 million is to be provided through supplementary funds is envisaged. UNICEF has received a total of US\$ 35.7 million from donors for the 1991 to mid-1994 period leaving an unfunded balance of US\$ 28.3 million. This balance, or a portion thereof, would enable UNICEF to continue to support the government in its sectoral programme and maintain momentum in a wide range of project activities.

The government of India is on the verge of achieving the goals of eradicating guinea worm disease and providing universal access to safe drinking water. It is therefore essential that this momentum is maintained. Perhaps more importantly, the water and sanitation programme has reached a point where advocacy efforts for increased resource allocation by government for environmental sanitation and greater emphasis on the participation of women in community managed water and sanitation programmes are beginning to show results and it is thus essential that UNICEF continues to support these areas of operation.

Due to very high population levels, the absolute numbers of people in India still without access to safe sources of drinking water and adequate means of excreta disposal represent the majority of the unserved population in the region (60% for water and 79% for sanitation) and a significant percentage of the global figure (over 10% for water and over 40% for sanitation). The degree of success achieved in India towards these goals will have a profound impact on regional and global coverage.

This document is a brief description of the UNICEF programme of support in the sector and a general appeal for funding from new partners. More specific and detailed proposals and information will be made available on request.

LIBRARY IRC
PO Box 93190, 2509 AD THE HAGUE
Tel: +31 70 30 689 80
Fax: +31 70 35 899 64

BARCODE: 14949
LO:

822 IN 94

The UNICEF Assisted, Government of India Rural Water Supply and Environmental Sanitation Programme

Programme Overview and Funding Proposal

Programme Achievements

Progress in the Rural Water Supply and Environmental Sanitation Programme should be seen as a continuum of activity with successful experiences gained over time and consolidated in line with the key UNICEF tenets of affordability (low cost and appropriate); replicability (the potential to go to scale); sustainability (achieving lasting results); capacity building (through community participation, ownership and empowerment); and assessment analysis and action (responding to communities changing needs).

The UNICEF supported programme in India is working towards the achievement of the Global Goals as defined at the World Summit for Children in 1990. The sector specific goals are: universal access to safe water and sanitary means of excreta disposal by the year 2000; and the eradication of guineaworm disease by the year 1995.

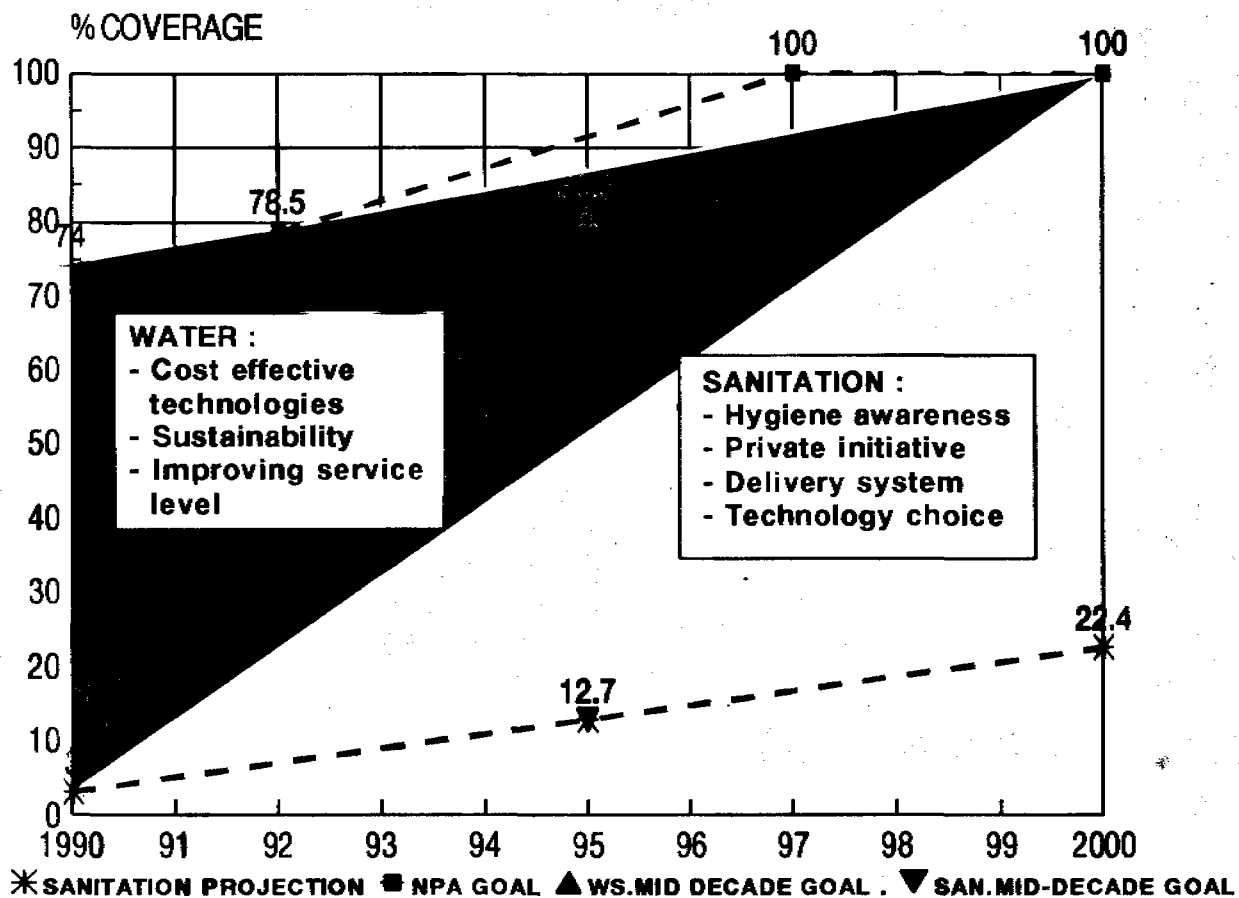
The rural water supply and sanitation sector continues to receive high priority from the Government of India (GOI). The 8th Five Year Plan saw an increase in sector allocations compared to the previous plan period from US\$ 3.25 billion to US\$ 5.5 billion which is 3.85% of the total government budget.

At the beginning of 1993, 78% of the rural population was estimated to have access to a safe water source. The goal of universal access is expected to be reached by end 1997, three years ahead of the Global Goal. Advances have been made in the introduction of technologies suitable for community management. In seven states, women demonstrated their ability to maintain handpumps and manage water systems. In an evaluation of handpump maintenance, women demanded basic reading and writing skills for reporting purposes, thereby making their participation more effective.

Sanitation coverage in terms of latrine construction is measured at 11% of which only 3% has been achieved by the government programme. The 8% achieved through private initiative is an indication both of the demand as well as the need for a flexible approach. However, latrines alone do not reflect an improvement in sanitation status and possibly a better measure of sanitation coverage in the India context is "hygiene awareness" which when achieved will create demand for latrines and other sanitation facilities such as bathing platforms, soakage pits, garbage disposal and smokeless chulhas. In this context, adoption of sanitation as a "package" by GOI is a significant development.

RURAL WATER SUPPLY & SANITATION

(GLOBAL GOALS AND COUNTRY PROJECTIONS)



Importance of the India Rural Water Supply and Sanitation Programme in the Regional and Global Context

In rural water supply, India at 78% has one of the best coverage figures in the South Asia region*. However when the absolute number of unserved people is related to the total unserved population of the other countries in the region, unserved Indians account for 60% of the total unserved people in the region. This is illustrated in the figure below.

For rural sanitation the situation is more pronounced. The unserved population in India represents 79% of the overall regional total of unserved people.

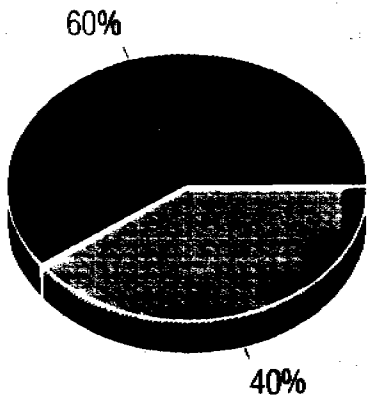
In the global context, India's unserved population for water supply represents over 10% of the world's total. For sanitation, the estimated figure is over 40%.

If the momentum in the rate of coverage in India for either sanitation or water supply slackens, the impact on regional and even global coverage for the sector will be severe.

* Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka

COVERAGE GAPS IN SOUTH ASIA

PERCENTAGE UNSERVED POPULATION



Water Supply



Sanitation

- | | |
|----------------|---|
| 1. Afghanistan | ■ |
| 2. Bangladesh | ■ |
| 3. Bhutan | ■ |
| 4. India | ■ |
| 5. Maldives | ■ |
| 6. Nepal | ■ |
| 7. Pakistan | ■ |
| 8. Sri Lanka | ■ |

Source: JMP Monitoring Report - Sector Status end 1991

UNICEF Programme Activities in 1994 and 1995

The 1991-1995 Plan of Operations for Rural Water Supply and Sanitation is based on the implementation of the following projects on a national scale:

- Water Supply
- Environmental Sanitation
- Social Mobilisation
- Integrated Guinea Worm Control
- Programme Management & Management Information Systems

Cross cutting these projects is the CDD-WATSAN (Control of Diarrhoeal Diseases - Water and Sanitation) strategy of reducing the incidence of diarrhoeal disease through preventive interventions in the area of water supply, environmental sanitation and hygiene education coupled with case management of diarrhoea and the linkage with nutrition.

The key programme activities by project is briefly described below:

Water Supply

Drilling, Well Rehabilitation, Improved Siting, Groundwater Management and Environmental Protection

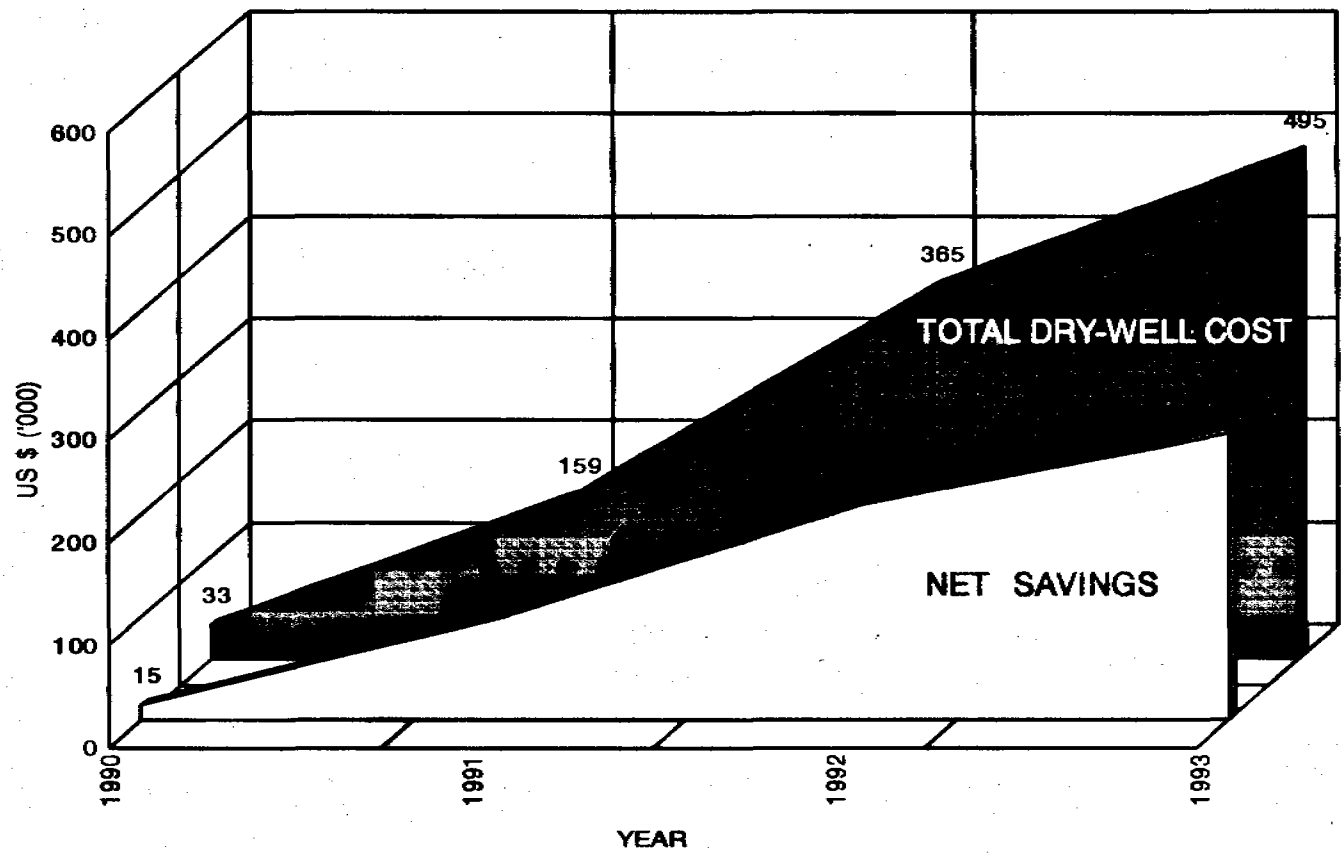
- In the coming two years UNICEF plans to continue supporting the government's drilling programme through providing spares to the existing drilling rig fleet and by procuring four additional rigs for use in under-served, difficult access areas.
- A further increase in emphasis on the cost saving technique of hydrofracturing is also planned. Through the procurement of eight to ten additional hydrofracturing units and advocacy for the development of an indigenous hydrofracturing industry, it is hoped that the overall efficiency of the groundwater development programme could be substantially improved. Since the cost of developing a poor yielding well through hydrofracturing is about one-third the cost of drilling a new borewell, the goal of improved efficiency is relatively easily reached (see the figure below).
- Advocacy and demonstration for improved well siting to increase the rate of successful wells was also planned for this period through the procurement of geophysical equipment and training. It is estimated that for every one percent increase in success rate over the present day figure of 85% through improved siting will save the sector \$1.25 million annually.
- The demonstration of portable, light weight drilling rigs is planned for 1994 to reach presently inaccessible and unserved areas of the country.

- Finally, an increase in emphasis on the environmental protection of groundwater sources through advocacy for better groundwater management practices, policies and legislation will continue. This area is becoming increasingly important due to the multiplying cases of serious contamination of drinking water sources in the rural areas of the country and dropping ground water levels.

Water Systems

- UNICEF puts great emphasis on the continued demonstration and advocacy for community based handpump maintenance systems. The use, and continuing research and development, of VLOM (Village Level Operated and Maintained) India MKIII and Tara handpumps is a key factor in this process. The long term sustainability of developed water sources with the existing centralized maintenance teams (for India MKII handpumps) is questionable due to the increasingly large resource outlay necessary by GOI to support the 2.3 million installed handpumps.
- The necessity of stressing women's full participation in the community managed systems will continue to be the subject of UNICEF advocacy through demonstration projects. The challenge is not merely the establishment of sustainable community water supply systems through women's involvement but also to design programmes to enhance women's status and power within their communities.
- UNICEF's capacity building programme of handing over the quality control of handpumps to the Bureau of Indian Standards (BIS) is entering a critical stage in 1994. It is crucial that the transition of responsibility for quality control from UNICEF to BIS progresses smoothly to ensure the long term reliability of a product that affects people's lives.
- Increasingly important to the sector is the development of alternative water delivery systems for presently unserved areas where the borewell/handpump combination is inapplicable. The development and demonstration of gravity feed systems, solar pumping technology, rainwater harvesting and sanitary dug wells is a requirement for the attainment of 100% population coverage in the country.
- Training is an important component of the entire water supply programme. UNICEF supports a wide range of training programmes in areas such as handpump inspection, drilling, hydrofracturing and community handpump maintenance.

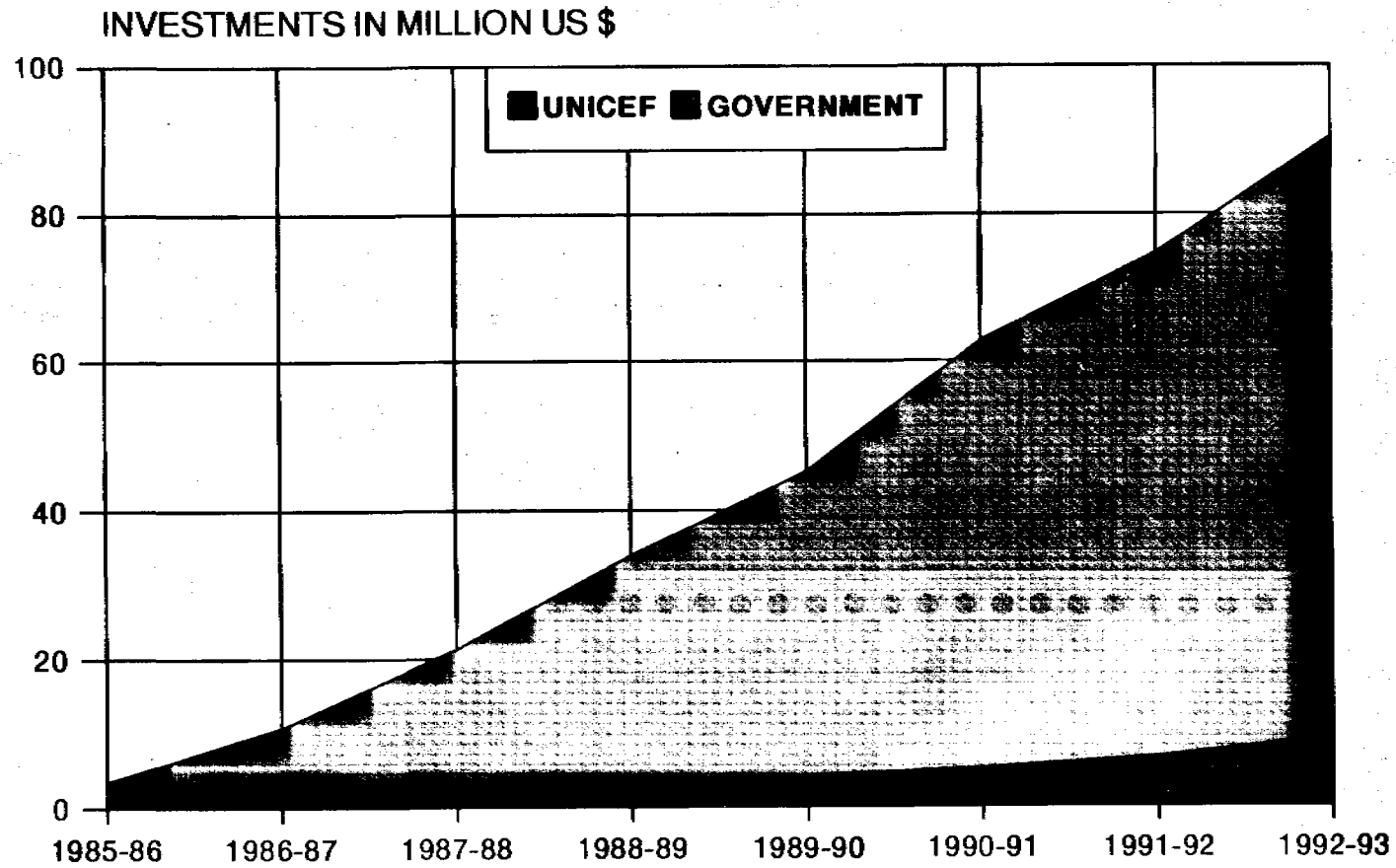
**REDUCTION OF DRY-WELL LOSSES THROUGH HYDROFRACTURING IN MADHYA PRADESH
(THREE UNITS - 1990-1993)**



Environmental Sanitation and Social Communication

- The lack of sanitary facilities hits women and girls hardest, both for reasons of privacy and security. Added to this is the inconvenience caused by long distance travel for defecation which has been the result of population pressure and rapid urbanisation. UNICEF's efforts to rapidly increase the rate of sanitation coverage is in direct response to this, in addition to health considerations.
- The 1992 National Seminar on Rural Sanitation led to several policy changes on the part of GOI, that had been strongly advocated by UNICEF, including an elimination of subsidies for families above the poverty line, a mandated 10% budget allocation for Information Education and Communication in Rural Sanitation Programmes and an increased flexibility in technology choice and an acceptance of alternate delivery systems.
- These policy changes have provided a window of opportunity for UNICEF in promoting and supporting the rapid increase in the rate of rural sanitation coverage that is required for meeting the mid-decade and global goals.
- The growing commitment of the GOI to rural sanitation programmes as reflected in resource allocation levels (illustrated in the following figure) is a very positive indicator and demonstrates an increase in momentum of progress in the sector.
- Several R&D and area-based projects are in progress to develop cost effective technological options to suit different geohydrological situations and socio-economic population segments. Alliances are being sought with the existing educational systems and media to promote both personal and domestic hygiene.
- Communication support to Water and Sanitation projects continues to deal with changing behavior of people through the use of situation-specific strategies which involve field workers, media, materials, NGO volunteers and demonstration models. Communication and Social Mobilization activities cut across all Water Supply and Sanitation projects. Information, education and motivation activities, together with associated training are especially designed to encourage participation of beneficiaries, especially women in these projects and to improve the projects' impact on development.
- UNICEF is promoting increased collaboration between different ministries such as Information and Human Resource Development to more widely disseminate sanitation messages.
- The creation of employment opportunities for women through the development of human resources (eg. women masons) is being encouraged to make women a part of both the planning and implementation of sanitation programmes.

CUMULATIVE EXPENDITURE ON RURAL SANITATION (CRSP + MNP)



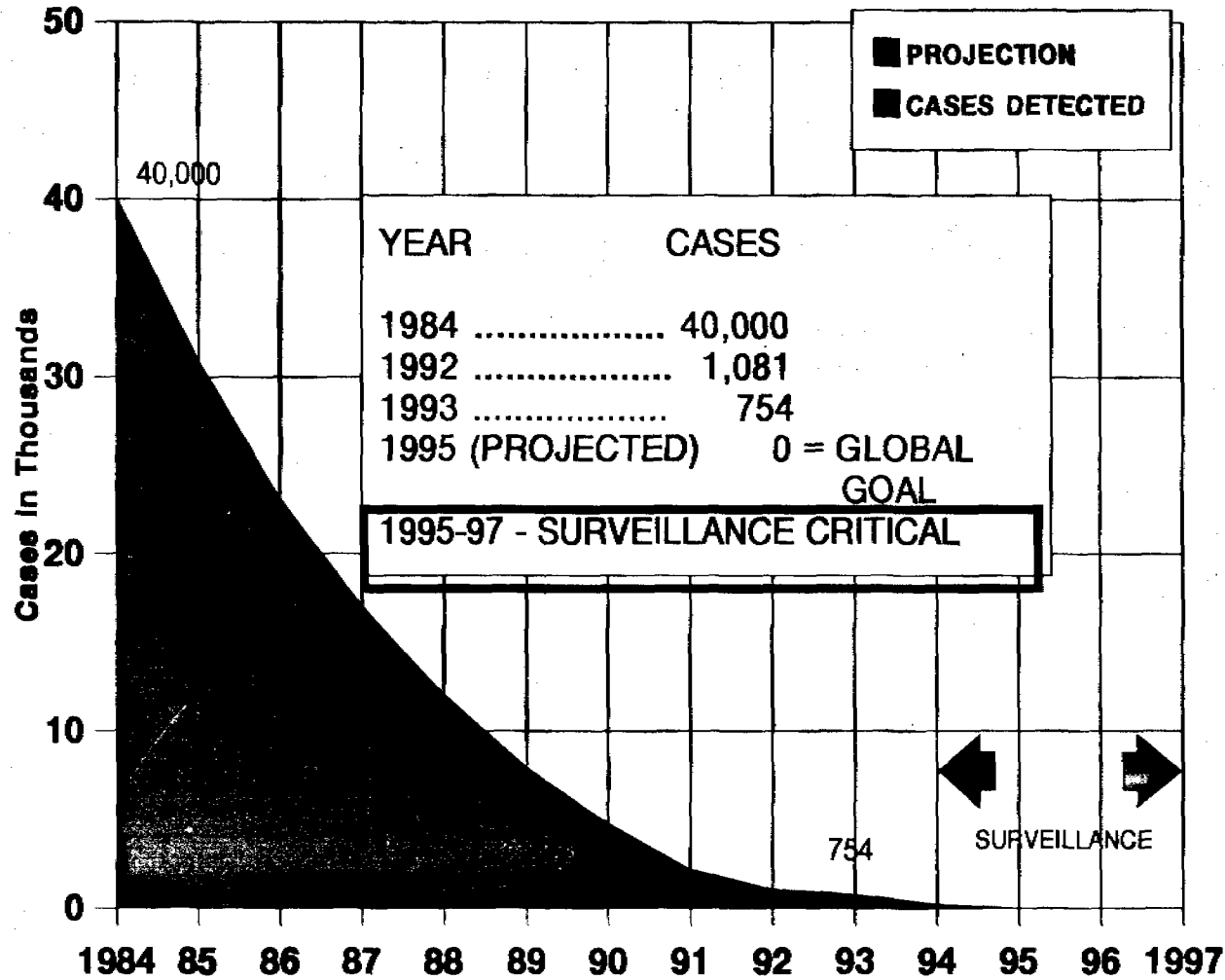
Integrated Water Supply, Sanitation and Guinea Worm Control

- The global goal of guineaworm eradication by 1995 has almost been achieved in India. However, the eradication of the final cases is expected to be one of the most difficult phases of the entire programme.
- At the end of 1993, the largest number of remaining guineaworm cases in India is in the State of Rajasthan. There are still 547 cases in desert areas of western Rajasthan out of a total of 754 cases in India.
- The only planned external support to western Rajasthan for guineaworm control is from UNICEF through this project.

Programme Management and MIS

- Over the next two years UNICEF plans to continue its support to central and state governments in the development and operationalisation of Management Information Systems.
- 1994 is a critical year for ensuring that systems are in place for the effective monitoring of the mid-decade and global goals.
- Increased focus by UNICEF on the development and implementation of computer-aided management support systems for state governments is planned for 1994 and 1995 in the following areas:
 - the establishment of data banks for village level data including the history of water supply schemes, water sources, etc. through the Programme Monitoring System implemented by the government's National Informatics Center.
 - the development and implementation of computerised state specific management support systems for promoting greater efficiency in sectoral activities.

GUINEAWORM ERADICATION



Funding Requirements

From 1994 to 1995, UNICEF's planned activities for the rural water and environmental sanitation sector in India will require an input of \$41.3 million. UNICEF has allocated US\$ 13 million of its own "general" resources for this period. The balance of \$28.3 million, or 69% of the total is still required in supplementary funding.

The following table details the funding shortfalls by project for the 1994 to 1995 period.

Project Code	Project Description	Total Planned (US\$×1000)	Funds Available to UNICEF (US\$×1000)	Additional Funds Required (US\$×1000)
01	Water Supply	18,208.7	4,977.5	13,231.2
02	Environmental Sanitation	8,780.3	2,401.9	6,378.4
03	Social Mobilisation	2,844.8	1,044.8	1,800.0
06	Integ. Guinea Worm Control	4,471.6	1,171.6	3,300.0
07	Programme Manag. & MIS	7,016.9	3,416.9	3,600.0
Totals		41,322.3	13,012.7	28,309.6

The programme described in the previous pages is considered a complete package: all projects contribute towards the overall objectives of the national rural water supply and sanitation programme. As such, UNICEF prefers that full or partial contributions from new funding partners be towards the programme as a whole.

Nevertheless, the programme can be segmented and prioritised on the basis of the following parameters:

- **Time:** the entire programme or individual projects can be supported on a phased annual basis
- **Location:** individual states or groups of states can be supported for the entire programme or for individual projects
- **CDD-WATSAN districts:** any or all of the 15 CDD-WATSAN districts can be adopted for specific support.
- **Projects:** any of the individual projects can be funded separately