

**India:**  
**Water Supply, Sanitation and Hygiene**  
Moving towards the 21<sup>st</sup> Century

**The Environment of the Child  
in  
Orissa State**

**Water Supply and Sanitation Programmes  
and  
UNICEF's role and contributions**

UNICEF Bhubaneswar  
August 1998



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## ORISSA

### Demographic details, key socio-economic and health indicators

S.No	Indicators	Status	Source
<b>Demographic</b>			
1.	Population	31,659,736	Census 91
2.	% of India total population	3.8	"
3.	No. of districts	30	PR Dept, GoO
4.	No. of development blocks	314	PR Dept GoO
5.	No. of main villages	46,989	Census 91
6.	No. of habitations	87,000 +	
7.	No. of towns	124	Census 91
<b>Socio-economic</b>			
1.	Rural Population on % of total population	86.6	Census 91
2.	% scheduled caste population	31.9	Census 91
3.	% scheduled Tribe Population	43.7	Census 91
4.	No. of Primary Schools	42104	Dept ofSME
5.	No. of Upper Primary Schools	12096	DSME
6.	No. of Secondary Schools	3367	DSME
7.	No. of Higher Secondary Schools	231	DSME
8.	No. of Pry. Health Centres	314	DoH&FW
9.	No. of Health Sub-Centres	5831	DoH&FW
10.	Sex Ratio	972	Census 91
11.	Population below poverty line	40 %	
12.	Per capita income	US\$ 170	
<b>Human Development Indicators</b>			
1.	Overall Literacy	48.5	Census 91
2.	Female Illiteracy	59 %	"
3.	IMR (per 1000 live birth) - 1996	95	MICS
4.	Under 5 Mortality Rate (per 1000)	131	
5.	Malnutrition among children under 4 years of age (Weight-for-age)	53 %	
6.	Children fully immunized by 2 yrs		

Natural calamities like floods, cyclones and droughts are recurrent features, which greatly affect the economic growth of the state.

The school drop-out rate at primary level, especially among girls in rural and tribal areas, is alarmingly high.

The development situation of Orissa is fraught with problems of poor infrastructure, under-utilization of human resources, lack of awareness and participation by the masses in development activities.

Dependence on the primary sector is almost complete. Agriculture, largely subsistence farming, is the mainstay and provides employment to 76 % of the working population. Forestry, mainly the collection of non-timber forest produce, is still a major source of livelihood in the western and southern districts.

Women constitute 27 % of the workforce and often work as on the family farm or gather forest produce. Because of the higher rate of participation of women in the work force in the eight districts with a high proportion of tribal population, the status of women, at least in terms of autonomy in decision-making, is superior. Women's literacy continues to be low (41%).

### Status of WES programmes

#### Access to, and use of, safe drinking water

Starting from very low levels of coverage in 1980, by 1997 coverage had increased to 88%. For the Scheduled Castes, coverage reached 83%, while for the Scheduled Tribes coverage increased to 88%. The number of spot sources (hand pumps or sanitary wells) has increased from 11,846 to 156,110 during the period. About 18,000 habitations, mostly in areas which are difficult to reach, are yet to be covered with hand pumps or any other safe source. However, there are problems remaining to be addressed particularly concerning water quality and maintenance.

A Multi Indicator Cluster Survey conducted in 1997 revealed that only 69% of households reported collecting their drinking water from a safe source (handpump-61%, protected dugwell-5%, piped water supply standposts-3%). Others get their drinking water from unprotected dugwells (22%) or pond/streams (8%). The rejection of safe water sources is generally because of excess salinity or iron in the water. Inadequate maintenance and repair also result in a large number of sources becoming defunct.

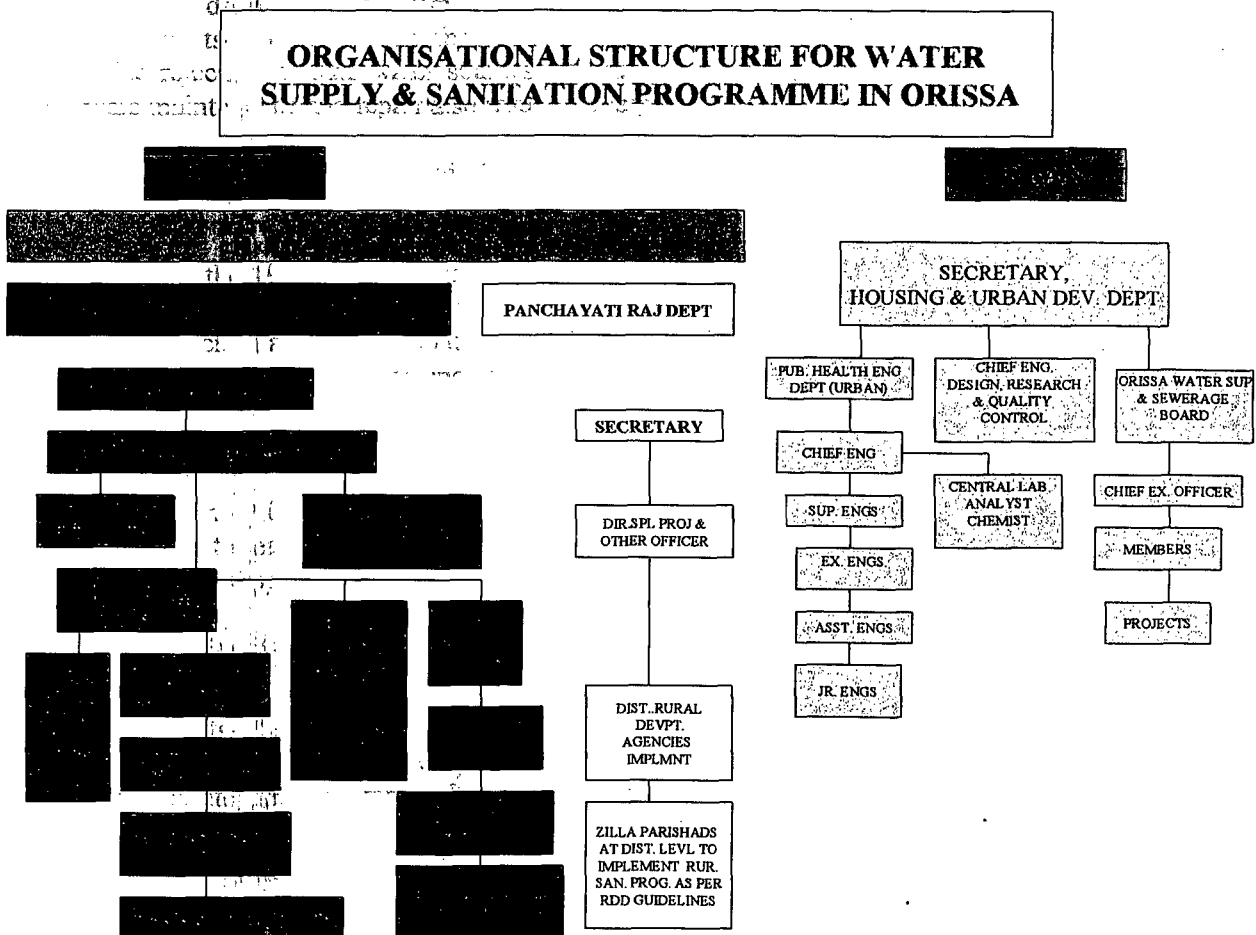
### Access to, and use of, home toilets

Less than 5% of the rural households are estimated to have toilets. While the 1991 census found 4% home toilet coverage, the 1997 MICS survey (referred earlier) reported 5% of households with a toilet. Most of this achievement has been made by private initiatives. The use of toilets is extremely poor by the rural people due to lack of awareness about the causative effect of poor sanitation on health status and quality of life. Even in urban slums, hygiene and community sanitation practices are totally unsatisfactory.

### School sanitation

Of the more than 42,000 primary schools in the state, about 25 % have access to protected water supply, while 10% have toilets/urinals. Primary schools, which are attached to an upper primary school, generally have better water supply and sanitation facilities. SCHOOL HEALTH SURVEY?

### Institutional structure



The Rural Development Department (RDD) is the nodal agency for the rural water supply and sanitation programmes in Orissa and has the overall responsibility for administration of the programme. The RDD also looks after rural works like roads, culverts, buildings and minor irrigation including lift irrigation. The

Principal Secretary, RDD, is overall in-charge of the department and is assisted by the Director, who is also the ex-officio Additional Secretary of the Department. There are two Deputy Secretaries in the department, one exclusively looking after the Rural Water Supply and Sanitation programmes.

The Rural Water Supply and Sanitation Organisation (RWSSO) is the implementing agency and it executes the Rural Water Supply Programme as per the direction of RDD. RWSSO is headed by the Chief Engineer (CE)-RWSS, who coordinates with the state and central government, through the Principal Secretary-RDD. The RWSSO has 6 circles, 24 divisions and 98 sub-divisions.

Till March 1997, RWSSO was also involved in the rural sanitation programme, but since then the implementation of the sanitation programme has been handed over to the Zilla Parishads. RDD, after pooling resources allocated under Centrally Sponsored Rural Sanitation Programme (CRSP) and the Minimum Needs Programme (MNP), allocates the programme funds directly to the Zilla Parishad with a guideline for implementation. The Deputy Secretary of RDD is the focal point for implementation and monitoring of sanitation activities in the state, including the IEC Cell. However, he does not have enough support or manpower to make it fully functional.

The IEC Cell for rural sanitation was created in 1992 in RDD. From July 1998, the Cell has a Deputy Secretary, a technical officer (from RWSSO) with other support staff. UNICEF provided support to the Cell for the initial three years, after which it was taken over by RDD. From 1993-1997, the Cell was very active, coordinating the entire Rural Sanitation Programme through a Communication Expert. The Cell co-opted NGOs into the programme, introduced the range of technological design options for home toilets mentioned earlier and launched extensive social mobilisation activities.

The HRD Cell was created in 1996 in RWSSO. The Cell is headed by a Supt. Engineer, assisted by one Executive Engineer, two Asst. Engineers and four Jr. Engineers. For 1997-98, the HRD Cell had a budget of Rs. 9.6 million. The Cell conducts training programmes for RWSS engineers, village handpump mechanics, SEMs. From 1998, the Cell has undertaken to train primary school teachers in five districts, with the help of State Council of Educational Research and Training. The Cell is active and functioning fairly well.

### **State WATSAN sector policy, plans and ongoing programmes**

Till 1989-90, the State drinking water supply programmes were under the administrative control of Housing and Urban Development (H&UD) Department. In 1989, with the formation of the Rural Development Department, the Rural Water Supply and Sanitation Organisation was created under the administrative control of the RDD. The services of the staff of RWSSO thus continue with the H&UD department although they work under the administrative control of RDD.

### **Rural Water Supply Programme**

The State Government is giving the highest priority to provide access to safe water to all habitations, to the current norm of one water point for 250 population within 1.6 km distance, to ensure 20 (NOT 40?) litres per capita per day.

State and central government funds are available for drilling, installation and maintenance of hand pumps and for the execution of village piped water schemes, including the application of slow sand filtration technology using water from village ponds. As a part of state government's concern and commitment for a time-bound attainment of "Health for All by 2000 AD," utmost priority has been given for covering all villages and habitations with safe drinking water and sanitation facilities.

To address the problem of salinity in ground water the Orissa Drinking Water project was launched in 1983 in three coastal districts with assistance from DANIDA. The DANIDA project attempted a number of innovative approaches in implementation and monitoring. Existing indigenous technology for drilling in alluvial formations was refined to improve the quality of

boreholes; hydro-geological inputs were applied systematically for source finding and for monitoring ; socio-economic inputs were provided for better planning, acceptability, monitoring and maintenance of sources; and a new system of decentralised handpump maintenance was field-tested. The DANIDA project also included a sub-project on Health, hygiene and sanitation promotion. Some of the elements field tested in the DANIDA project later became a part of the RWSSO system. For instance, hydro-geological resources are now a part of RWSSO. Similarly the decentralised system of handpump maintenance, using Self-Employed Mechanics (SEMs), is now planned for extension, to be part of a Gram Panchayat managed system.

RWSSO has ... laboratories. The labs have the capacity to test the chemical as well as the bacteriological quality of water. (POLICY AND PRACTICES ON W/Q TESTING)

### Rural Sanitation Programme

The rural sanitation programme was formally launched in 1985 at the initiative of the Community Development and Rural Reconstruction Department (CD & RR), under the Minimum Needs Programme. The Centrally Sponsored Rural Sanitation Programme (CRSP) was launched in the subsequent year. In 1986, a pilot project on rural sanitation was also launched with support from UNICEF. In 1989, the CD & RR Department was reconstituted and the Panchayati Raj Department was formed, and the sanitation programme was taken over by the PR department. When RDD (and RWSSO) were formed in 1990, the programme was transferred to RDD/RWSSO.

RWSSO, while quite comfortable with the technical aspects of the rural water supply programme, had limited institutional sensitivity to social aspects, even less so in the context of low-cost toilets. The prevailing development paradigm was mostly delivery/consumption oriented, while the concept of cost-sharing was still relatively alien, with only a few isolated experiments mainly in the NGO sector. RWSSO therefore concentrated on the construction of institutional sanitation facilities.

At that point of time no technical or implementation guidelines existed and there was no concept of toilet design options. The only design being promoted was the twin leach pit design. RSP was limited to identifying beneficiaries to accept the latrines with 80 % subsidy and 20 % contributed by the household, providing free labour. Demand generation was not considered. Although participation by user community was mentioned, this was certainly not effectively practiced. The programme was wholly driven by subsidy.

Ironically, Orissa is the 'birthplace' of the first ever single pit sanitary low cost sanitary latrine in the country. The *Barpalli* (a block in Sambalpur district) design of single-pit pour-flush sanitary latrines was introduced in Orissa as early as in the late 1950s. Thus, by the time the twin-leach pit design was promoted through the subsidised programme in the state, the single-pit design was already widely known in the State.

In 1992, an IEC Cell was established in the RDD with support from UNICEF. In 1993 the CRSP guideline was revised to introduce a number of major changes in the programme strategies. For the first time a conscious strategy was devised to create demand in the sector and a range of options were introduced in the centrally sponsored programme. A range of six options starting from Rs 540/- to Rs 2440/- were offered therefore in the state supported programme with 80% subsidy to the motivated BPL (Below Poverty Line) beneficiary by the NGOs. RDD, through its IEC cell created an enabling environment for NGOs to participate in the programme. Training, motivation social mobilisation, and deworming camps became integral components of the programme. Organisations like the National Service Scheme, the Nehru Yuva Kendra, the BGVS were inducted into the programme to play *niche roles* in social mobilisation.. Between 1993-94 and 1996-97 more than 38,000 household sanitary toilets were built in this process, which was more than 200 %

of the achievements during the period 1985-93. More important, the programme developed a sensitivity to *demand* as the key issue. However a review of the programme last year indicated that a large proportion (around 70%) of the toilets built with subsidy continued to be of the more expensive two-pit design.

RDD also recognised that the rural sanitation programme would require a strong motivation component and took a decision to co-opt the NGO sector in a big way. RWSS' role was modified to technical-advisory-supervisory aspects only. A group of eight NGOs and two corporate institutions (the Orissa Renewable Development Agency and Sulabh International) were identified to implement the programme on a turnkey basis, starting with demand assessment and completing with monitoring of use. These nodal organisations are referred to as "catalytic agencies" established their own respective networks of "partner organisations" for implementation in the field. Although the RDD guideline suggested a maximum of 20 partner organisations for ease of supervision, some of the catalytic agencies eventually developed networks of more than 140 partners.

After April 1997, implementation of rural sanitation program has been handed over to the Zilla Parishads. RDD issues guidelines based on the six design options for toilets to be constructed with subsidy to BPL families, ranging in cost from Rs.600 to Rs. 3,000. Recently, the RDD has taken a decision to limit the amount of subsidy to a maximum of Rs 300/- to cover a part of the cost of a single-pit unit.

The need to address those families who are not classified in government records as BPL and therefore not eligible for subsidy has now been recognised. RDD is taking concrete steps in this direction by initiating the promotion of household toilets without subsidy by adding a small component for motivation. The emphasis is shifting from exclusive use of subsidies to reduction to a flat minimum to support only a part of the cost of the lowest cost single pit design to increase coverage, combined with use of strategies for demand creation.

The convergent approaches being tried out in the CDD-WATSAN project districts provided the testing ground for other new approaches. Recently, the private sector initiative which was already existing has been co-opted into the programme in Ganjam district.

IEC. In 1995-96, GoI initiated a IEC strategy for WatSan. The IEC strategy intends to sensitize people about utilization of water and sanitation. In Orissa three districts (Sundergarh, Malkangiri and Kendrapara) were selected to be taken up for intensive IEC activities. However, even though Rs. 11 million were made available, activities are yet to take off because GoO was initially unable to provide the required matching State funds and also because the identified nodal non-government agency (BGVS) failed to deliver. Recently it has been revived and the strategy is expected to be operational by end of 1998.

### **School sanitation**

GoO is making use of GoI funds under the 10<sup>th</sup> Finance Commission recommendations. Using these funds, which are channeled through the Education Department, RWSSO is providing handpumps and toilets at rural primary schools. The Education Department is also using Sulabh International to provide toilets at primary schools, especially for girls. However, overall progress is slow, and a majority of primary schools still lack these basic facilities.

From 1996, the Directorate of Teacher Education and State Council of Educational Research & Training (DTE & SCERT) have started an orientation programme for primary school teachers. Initially the programme was piloted in the two CDD-WATSAN districts. Phulbani district has now been fully covered. The HRD Cell of RWSSO is collaborating with DTE and SCERT to extend the programme to five other districts using the same methods and materials.

SCERT has prepared a handbook in Orya for the orientation of primary school teachers on water supply and sanitation. A similar handbook is now under preparation for secondary school teachers.

SCERT is also in the process of revising the primary school curriculum, to include basic minimum concepts relating to water supply, sanitation and hygiene in a graded manner. Textbooks for grade one have already been revised.

**Long-term planning.** A State level Water-Sanitation committee was constituted in 1997 under the Chairmanship of the Chief Secretary. In the first meeting of the Committee, held in June 1998, it was decided to set up a state level mission to address the problems of rural sanitation and to ensure full coverage within a period of next ten years. Emphasis in this mission approach will be on demand generation, instead of the existing subsidy-linked approach. A flat subsidy of Rs.300/- and a motivational fee of Rs.50/- have been fixed for households identified as BPL. A range of technological options will be promoted, which will allow households to construct toilets, which are affordable. Inter-sectoral cooperation and convergence in the field of health, education, nutrition and WatSan will be pursued. It has also been decided to introduce topics on sanitation and hygiene in the course curriculum of both the formal and non-formal education systems, up to the secondary level. Alternate delivery system for rural sanitation through the promotion of sanitation production centres and rural sanitary marts will be expanded. Priority will be given to provide water and sanitation facilities in the primary schools.

### Strength and weaknesses of existing institutional structure

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> <li>▪ Various Government departments like Health, Education, Rural Development and RWSS work in collaboration with UNICEF, CARE, SCF (UK), OXFAM and other supporting agencies.</li> <li>▪ Inter-departmental coordination and sectoral convergence are emphasized at state and district level.</li> <li>▪ Comprehensive MIS for rural water supply and sanitation is implemented in four districts. GOI has allocated necessary budget to extend this system to all 30 districts.</li> <li>▪ RDD has an extensive infrastructure to carry out WATSAN activities all over the state.</li> <li>▪ The decentralised system of government administrative functionaries has been effective in working with NGOs.</li> <li>▪ A number of local NGOs with good track record are working on water supply and sanitation at grassroot level.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reluctance and delays in Government to devolve power and responsibility to the Panchayats.</li> <li>▪ Lack of adequate funds.</li> <li>▪ Lack of convergence with the line department and its officials</li> <li>▪ RWSS focuses only on water supply and lacks initiative for sanitation.</li> <li>▪ Frequent transfer of Govt. functionaries.</li> <li>▪ Currently non-functioning IEC cell.</li> <li>▪ Panchayats are not geared to handle water and sanitation activities.</li> <li>▪ Lack of adequate skilled manpower.</li> <li>▪ Lack of efficient monitoring and evaluation system.</li> <li>▪ Inadequate working rapport between NGOs and administration.</li> <li>▪ Lack of firm commitment and genuine interest among many politicians and bureaucrats.</li> </ul>

### Decentralisation

In the beginning of fiscal 1997-98, a decision was taken by the Government of Orissa to hand over the responsibility of implementation of Rural Sanitation Programme (and some others) to Panchayati Raj institutions in conformity with an overall intention of the government to empower Panchayats. (As mentioned earlier, maintenance of handpumps is also an area that is being handed over to Panchayats, in a phased manner.) Thus Zilla Parishads would, from then on handle the programme. However, the Zilla Parishads themselves had come into existence after a break of two years and therefore still do not have the capacity to handle and administer any programme. The process of training of Gram Panchayat representatives in relevant issues including the key issues in water and sanitation is an activity that has

been taken up by the State Institute of Rural Development. UNICEF is also an active partner in the process.

The Panchayati Raj system recently introduced in the state has not been able to gain strength and government support to undertake responsibilities for carrying out WATSAN programme. The government has planned to transfer power and responsibility in all 314 blocks to Gram Panchayats for maintenance of hand pumps in a phased manner. In the first phase 30 blocks have been taken up and of these, 18 blocks where some progress has already been made in this regard will be taken over by Panchayats immediately. In this system, a Self-Employed Mechanic (SEM) will be identified in consultation with Gram Panchayats to look after the routine maintenance of 20 – 25 hand pumps. The Gram Panchayats are to supervise the functioning of SEMs and administer the process of payment of honorarium to SEMs. This system initially field-tested in DANIDA supported project and later extended to the CDD-WATSAN districts with the participation of Panchayats, is to be replicated.

### **Gaps - unreached area and groups**

There are 11,850 partially covered and 2,390 non-covered villages for safe drinking water. More than five million households have no home toilet.

### **Problems and issues**

#### **Rural sanitation**

The following factors account for the extremely low and stagnant coverage of home toilets:

- Lack of awareness and knowledge about poor sanitation as a major contributing factor for death and disease, especially among children.
- Low budget allocations for sanitation.
- Lack of inter-sectoral convergence and inter-departmental cooperation.
- Inadequate IEC support.
- Lack of skilled manpower.
- Low participation of women.
- Lack of motivation among people.

#### **Rural Water Supply**

In rural water supply, despite the high coverage, actual use of protected water sources is still low because of:

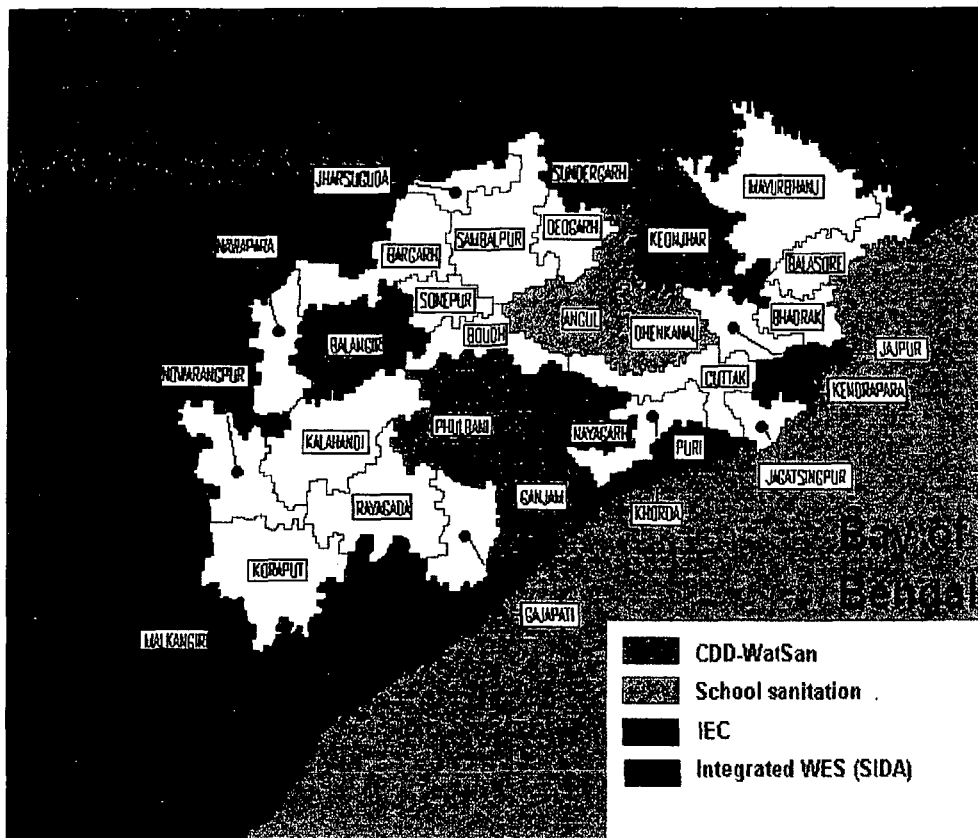
- An inefficient maintenance and repair system.
- Excess iron, fluoride and salinity in a significant proportion of wells.
- Lack of awareness and participation by communities for handpump maintenance and repair
- Inadequate IEC activities.
- Lack of awareness about cause and effect relationship between water, sanitation, health and development.
- Low involvement of women.
- Insufficient skilled manpower.
- Slow adoption of innovative alternative technology options for safe drinking water.
- Inadequate water quality monitoring and surveillance.
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### **UNICEF-GoO programme**



## UNICEF-GoO programme

### Programme of collaboration



UNICEF has been a partner to the government right from the inception of the rural water supply and the rural sanitation programmes in the state. From the early 1970s till the mid-1980s, UNICEF support largely focused on the development of water well drilling, handpump installation and O&M systems. In early 1980's Orissa was one of four states in which the first attempts at community participation –the 3-tier system with village level caretakers was field tested. From the late 1980s, UNICEF started support for a

wider range of programme components. In 1992, UNICEF established a Field Office in Bhubaneswar. The closer interaction resulted in a number of new initiatives in the sector.

As of mid-1998, the Field Office has a staff strength of 15. Of the seven professional staff, one is a water supply and sanitation specialist.

In 1998, the Field Office programme expenditure is expected to reach about US\$ 2.5 million, of which about US\$ 0.9 million (36%) will be on the Child's Environment programme, in support of the State water supply and sanitation sector. About 55% of the WES budget is allocated for water supply, 27% for sanitation (incl. social mobilisation, communication), 22% for MIS and staff support.

The following covers the range of aspects covered by UNICEF programme of cooperation in water supply and sanitation in Orissa.

#### Water Well Drilling

As elsewhere in India, UNICEF has considerably contributed to the water well drilling. Currently, 19 UNICEF-supplied drilling rigs, all supplied many years ago, are still in operation in the State. In 1997, these rigs drilled about 800 of the 10,000 or so new borewells, which are added annually by RWSS. From 1991 till 1997, UNICEF gradually withdrew support for water well drilling in the State.

### **Decentralised handpump maintenance**

The state has introduced a decentralised form of handpump maintenance in 30 blocks, on experimental basis. Ownership will be with the Panchayats. Self-Employed Mechanics (SEM) will be selected and hired by the Panchayats. In a phased manner, the entire maintenance and repair cost will be borne by the Panchayats, from their own resources. UNICEF is providing training and social mobilisation support in five blocks.

### **Sustainability of water sources**

UNICEF is assisting RWSS to introduce water well rejuvenation in the programme. Three hydro-fracturing units and 12 tractor-mounted compressors are now used to fracture or air-flush wells. Orissa is one of very few states which has an institutionalized well rejuvenation program with an allocation of approximately one million rupees annually in the budget for the purpose .

### **CDD WatSan**

In 1992, RDD started, with UNICEF support, the implementation of the CDD-WatSan strategy in Phulbani district. This strategy, linking water-sanitation-and health, aims to reduce diarrhoeal mortality and morbidity. In 1996, the strategy was extended to neighboring Ganjam district. The strategy aims to increase the use of safe water, sanitary toilets and the practicing of personal hygiene, especially proper handwashing; complemented with community and household action to properly manage diarrhoea among children. The strategy emphasizes the importance of establishing linkages with ICDS (AWW), health, education and nutrition line agencies. Messages are now conveyed not in a piecemeal approach but in a comprehensive package.

### **Alternate delivery system for sanitation**

More recently, UNICEF has made preliminary efforts for promoting Rural Sanitation Marts. UNICEF is also negotiating with government to take up innovative social marketing strategies to facilitate promotion of rural sanitation through private initiatives.

### **IEC**

In 1992, UNICEF supported RDD to set up an IEC Cell. While this cell was active from 1993 till 1997, as of now the unit is not functional.

### **Sanitation and hygiene in schools**

Personal hygiene and sanitation topics have been inducted in primary schools in Ganjam and Phulbani districts. SCERT had actively cooperated in developing specific training materials for teachers and students. This is modeled on child to child (learning) and child to parents and parents to neighbours. The teacher training methodology and resources developed for Joyful Learning in the UNICEF-supported Primary Education programme in the state have been applied.

### **MIS**

UNICEF is supporting the development of a Management Information System (MIS) for RWSS' use, which is implemented in four districts (Phulbani, Khurda, Puri and Nayagarh). This system is

## MIS

UNICEF is supporting the development of a Management Information System (MIS) for RWSS' use, which is implemented in four districts (Phulbani, Khurda, Puri and Nayagarh). This system is now partially operational. Realising the potential positive impact of the project, the government has allocated funds to extend it to all the remaining districts.

## Training

UNICEF actively supports training for masons, village-level health workers, Panchayat members, SEMs, NGO staff and functionaries, AWW, and others.

## Convergence

The effectiveness of the CDD/WatSan strategy has been established in KAP study in 2 focus districts. Inter-sectoral cooperation between WatSan, health, nutrition, Education, Community development and Women and child development sectors clearly has a synergistic effect. Social marketing of ORS has been initiated in the CDD/WatSan areas with support from DRDA, Health, and School and Mass Education wings of the state and NGO sectors.

## Replication

All strategies, approaches or technologies which are introduced with UNICEF support must be replicable without the benefit of additional external support. Some of the replicable aspects are:

- VLOM pumps (65/ 50 mm India Mark III handpumps/ TARA pumps) are now part of RWSS normal procurement
- Tubewell rejuvenation is part of RWSS normal programme
- Hygiene education in schools piloted in CDD-WATSAN projects has gone to scale with RWSS resources

## Influence on Government Sector Policy

The following table lists the programme components or strategies, which UNICEF has been advocating for in the State, and a frank assessment of the impact this advocacy has so far had on the State WES programmes.

UNICEF-GOI WES PROGRAMME OBJECTIVES (1991-98)	ASSESSMENT OF IMPACT ON STATE POLICY
Progressive reduction of subsidies to promote toilets	Decision to reduce subsidy to a flat Rs 300 per unit for identified poor to cover part of the cost of a basic single-pit design only
Promotion of a range of toilet design options	Six designs starting from single-pit (unit cost Rs 540/-) to twin-pit with superstructure (unit cost Rs 2400/-) promoted in the programme
Use of alternate delivery system to promote sanitation.	Being piloted in one district; in the process of being launched in three others
RSMs or production centres in 20% of blocks	10% of blocks served by Production Centres; RSMs established and functioning in 5 % of blocks
Use of the seven components of sanitation	State does not yet have an IEC strategy in place; it is in the process of being reformulated
Safe water handling practices, as part of IEC	
Functioning IEC cells at State level	IEC cell established in 1993 and was functional till 1997
School sanitation introduced	Teachers' training and orientation complete in one district

UNICEF-GOI WES PROGRAMME OBJECTIVES (1991-98)	ASSESSMENT OF IMPACT ON STATE POLICY
	and part of second district; being extended to another five districts. Curriculum revision is in process
One spot source of drinking water for 150 people	Adopted in one district only
Reduced dependence on UNICEF for support for State water well drilling operations	Dependence has been reduced to a bare minimum.
Increased success rate in well drilling, resulting from the use of scientific source finding techniques	RWSS does not have an effective programme for scientific source finding.
Maintenance and repair of handpumps with community participation, especially women	State has resolved to decentralise handpump maintenance to the Panchayats, in a phased manner. Work initiated in 16 blocks with UNICEF/OXFAM support
Cost-recovery for handpump maintenance and repair	No action yet; Government funds are made available to the Panchayats for maintenance/repair costs
Use of VLOM type handpumps (IMIII and TARA)	IM III and TARA pumps are now a standard part of the Government RWS programme
Village WatSan Committee at Panchayat level	Being formed in five pilot districts. GoO agrees in principle to make village wat/san committees functional
Use of low-cost and appropriate water supply technologies	Spring protection and HRF/SSF are in operational research phase
Use of appropriate water treatment at home/community level	No progress
Effective operational linkages between water, environmental sanitation and health interventions	Operational in two CDD-WATSAN districts only
WES interventions as an effective entry point for CDD, nutrition and women's development	
Appropriate watershed management	UNICEF has not given extensive support in this area
Effective use of well rejuvenation technologies	From 1997, the State budget includes specific allocation for well rejuvenation operations. Decommissioned rigs with working compressors, TMCs and HFUs are used effectively
Use of Management Information Systems relevant and practical to the WES sector	Established in three districts, but not yet fully operational

## Partners

UNICEF's partners include RDD, Department of Panchyati Raj, Department of Health, Department of Education, Zilla Parishads, District and Block and Village Panchayat institutions, donors, other U.N. agencies, as well as NGOs such as the National Dairy Corporation, Samanwita, Jagruti, PRDATA, Banabasi Seva Samity etc.

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