


822 IN93



The Emerging Power

Women in the Indo-Dutch
Water Supply and Sanitation Projects



This brochure is meant to provide a general overview of Indo-Dutch co-operation in the water supply and sanitation sector, with specific regard to the position of women. While every effort has been made to verify the information, no claim is made to its accuracy in every aspect.

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The Emerging Power

**Women in the Indo-Dutch
Water Supply and Sanitation Projects**
An overview of a policy put on an operational footing



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INTRODUCTION

Since its inception in 1978, the Indo-Dutch projects have evolved into a programme with strong social objectives, adhering to policy guidelines laid down by the Indian and Dutch Governments.

Executed in Andhra Pradesh, Gujarat, Kerala, Uttar Pradesh and, recently, Karnataka, the programme is planned and implemented in co-operation with government departments, parastatals and non-governmental organisations, to ensure sustained water supply and hygienic sanitary conditions in the villages involved.

Often, through innovative ways, the programme tries to overcome obstacles to women's participation and aims at strengthening the influence they exert over projects implemented in their vicinity. This process has shown promising results.

As experience in projects accumulates, it is being increasingly realised that men and women play a variety of roles, often overlapping and complementary. Women are responsible for the well-being of the household, for the collection, storage and use of water. They are also the guardians of household cleanliness.

This gender awareness has emerged over the years, with varying intensity, helping shape the planning process and methods of implementation, helping define operation and maintenance procedures.

This booklet specifically details the involvement of women in the programme.

It deals with the role women play in water supply and sanitation and outlines a gender-sensitive approach. It also documents the various Indo-Dutch projects implemented in the five concentration states, describing and illustrating the various choices made and the organisations that helped shape the programme.

The focus is clearly on the positive experiences and achievements resulting from the various projects. It is hoped that this attempt will stimulate policy makers, administrators, representatives of NGOs and the general public to try out similar approaches.

Peter M. Flik

First Secretary

Water Supply & Sanitation

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The world wakes up to 'woman power'

When 1975 was declared the International Year of the Woman, it was, in a way, an acknowledgement of woman's immense potential as a dynamic social force able to contribute to the development of her country. Which, in turn, called for a gender-sensitive approach to all developmental activities.

Ever since, Women in Development (WID) has become a bonafide issue on the world's agenda.

Empowering women through development

Dutch development co-operation acknowledges that men and women are equally entitled to income, education and health care. However, it also believes that women have just as much right as men to shape their own lives and join in discussions and decisions on development.

This policy of giving women a greater say is referred to as promoting 'empowerment'.



The elements of 'empowerment'

According to WID Policy, 'autonomy' or 'empowerment' means freedom and opportunity for each individual as understood in the context of combating poverty and inequality on the grounds of class, gender and race. It consists of four strongly interrelated elements — physical, economic, political and socio-cultural.

Development co-operation based on the principle of 'empowerment' for women endorses a vision of 'power distribution' in all its aspects.

Empowerment : no instant formula

There are no instant recipes for 'empowering' women in India, as their situations vary from state to state.

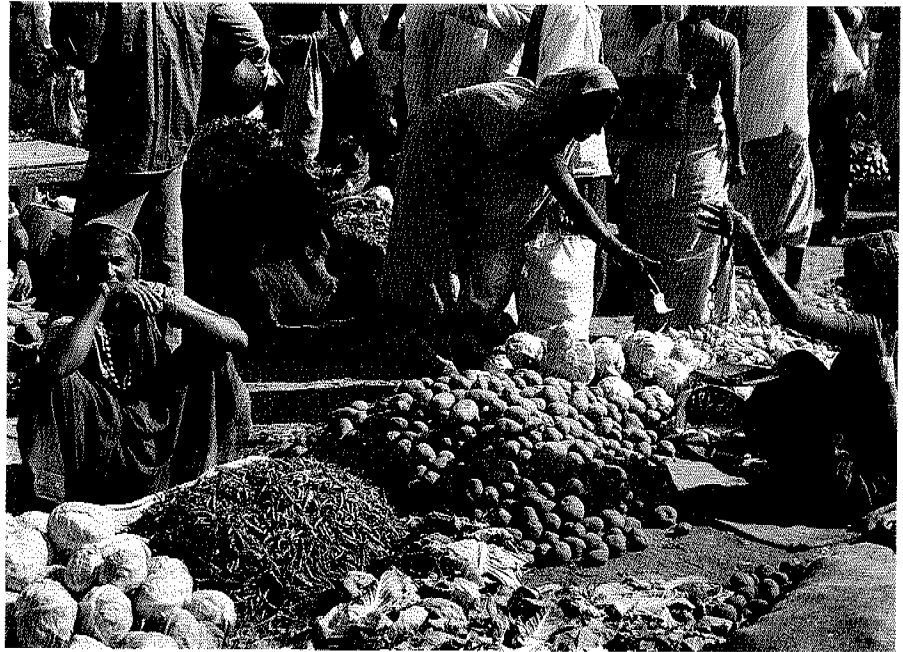
Even within individual states, not all women live in the same circumstances. There are differences between rich and poor, urban and rural, young and old, class and caste.

From policy to practice

Policy is translated into practice to make it applicable to the diverse situations in which women live.

For this purpose, a special programme on Women in Development has been established by the Directorate General for International Co-operation (DGIS), under the Ministry of Foreign Affairs. It aims to empower women by giving them a fair share of the benefits of various development programmes.

In India, a First Secretary, WID, has been placed at the Royal Netherlands Embassy in New Delhi, since 1985.



DAC/WID criteria

The role of women in development adheres to a policy in which criteria laid down by the Development Assistance Committee (DAC) are kept in sharp focus :

- ❖ by consulting women in the host country on project design;
- ❖ by actively involving local women in project implementation;
- ❖ by identifying and removing obstacles to the participation of women; and
- ❖ by utilising WID expertise throughout the project cycle.

A nation thirsts : the water problem in India

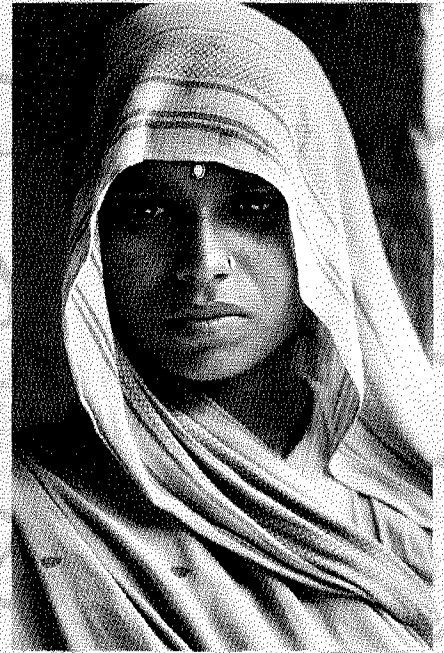
Here, traditional water sources ensure neither quality nor quantity, and women often tread long distances to bring home their daily water needs.

Here, the drying up of water sources and failed monsoons have left in their wake acute water shortages, droughts and consequent famines, affecting the

health and livelihood of its people.

This is rural India which houses 75% of the country's population.

Where water shortages have led to low productivity, low employment, low income generation and, ultimately, low living standards.



◀ In Karnataka, water scarcity drives people to desperately seek out water from any source



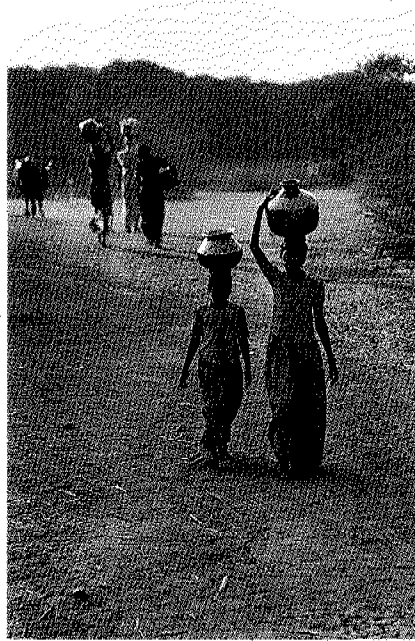
Where development of water resources can help in the development of its human resources. Human resources so vital to India's economy and progress



Together with regular household chores, women also tend cattle



△ *Queueing up for water is a daily ritual in which most women waste productive time*



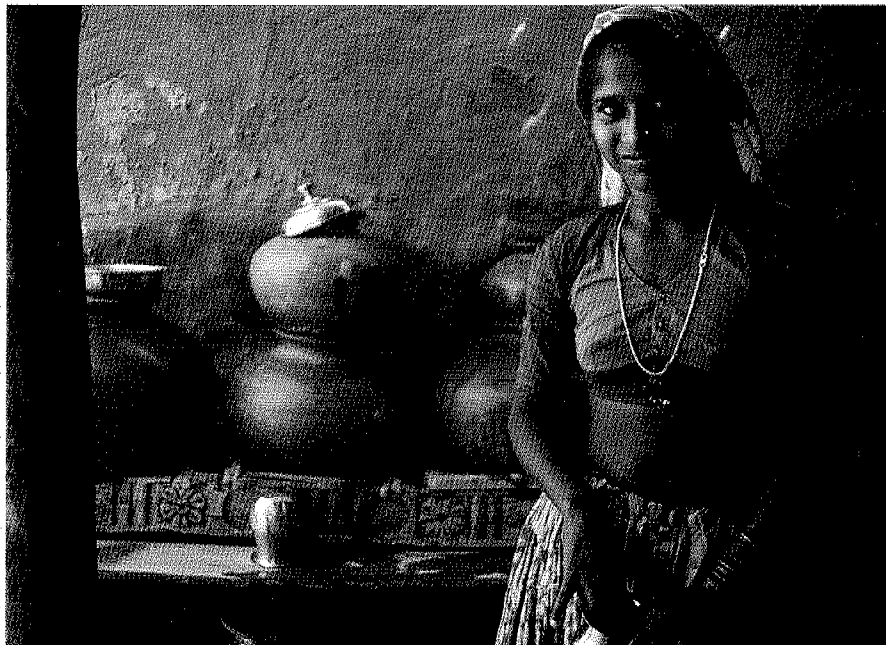
Developing water facilities touches a woman's life

Her life revolves around it.

She decides on the water source. She determines the quality and quantity of water for her household and the purposes for which it is to be used.

In fact, the rural Indian woman spends between one and four hours, daily, collecting and transporting water.

After which she stores it, uses it, disposes of it.



◁ *A 'paniyar' – the traditional means of water storage in every household in Gujarat*



Sometimes, she employs traditional wisdom to filter or purify the water.

Often, she directs her children as to its usage.

But, always, it is the woman who is the custodian and manager of water.

The availability of water facilities near her home reduces the drudgery and time spent in fetching this very vital resource.

**It looks pure, it tastes pure.
It must be pure!**

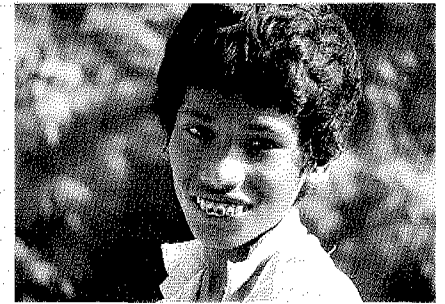
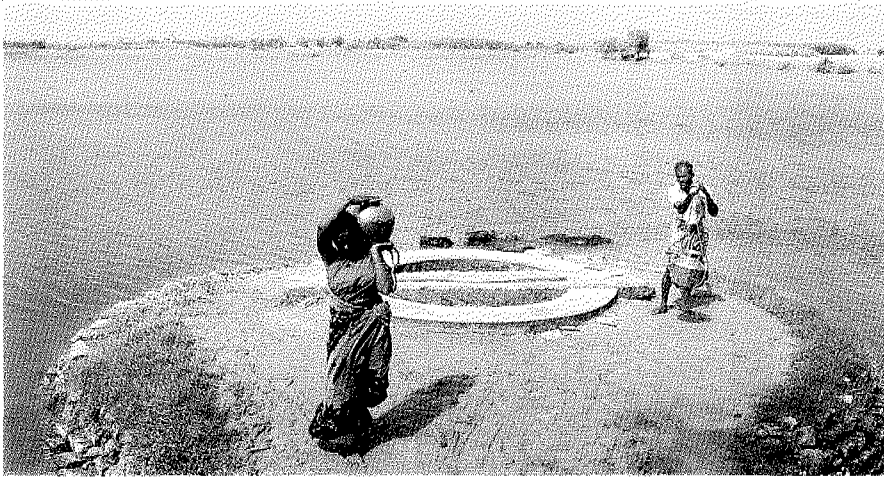
In India, the idea of pure water is often clouded by sensory perceptions.

Water that looks clear, is pleasant to taste and helps cook food quickly, is usually considered good. Technical purity is of little consequence.

In fact, the smell or taste of iron sulphide or chlorine may not be found acceptable, and flowing river water, though polluted with visible chemical and human waste disposals, is nearly always preferred.



△ *People who have been made aware can exercise their discretion in choosing water from a 'safe' source, rather than an impure one*



Death flows unseen

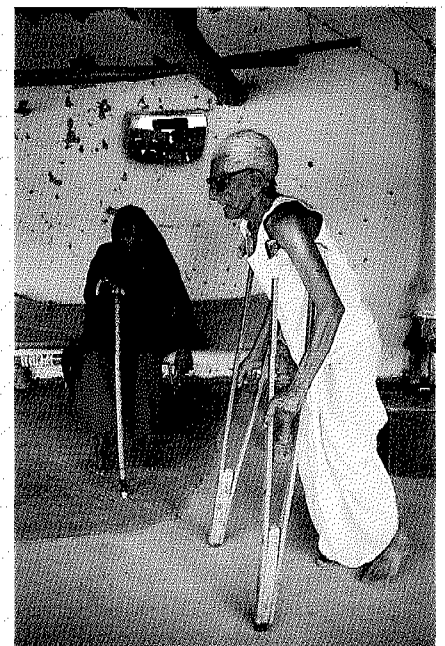
The World Health Organisation (WHO) has estimated 80% of all diseases in developing countries to be water-borne and water-bred.

And while water is necessary for sustaining India's rural economy, what is available is often highly contaminated.

The problem is further compounded by lack of proper sanitation facilities and ignorance regarding matters of health and hygiene.

All of which lead to water-borne gastro-intestinal diseases that are epidemic in nature, and usually fatal — adversely affecting the health of people and livestock.

△ *People in Andhra Pradesh and Gujarat affected by fluorosis*



The boundaries of cleanliness

Cleanliness begins at home.

Unfortunately, for most rural women that is where it also ends.

She may maintain a spotless home and a kitchen which is scrupulously clean, but this zeal is limited to the boundaries of her home. Outside, it is a different matter altogether.

Curiously, latrines are considered unhygienic and have no place inside her home, but her floors and courtyard will be covered with cowdung to keep them 'sacred' and 'antiseptic'.

Suffering lack of sanitation : the plight of India's rural woman

In the lack of water and sanitation, it is the rural woman who suffers most.

Her defecation practices, shrouded in shame, demand that she relieves herself in secrecy in the early hours of dawn, or after dusk — a difficult task in areas of endemic diarrhoea. Especially if she has to go to fields far from



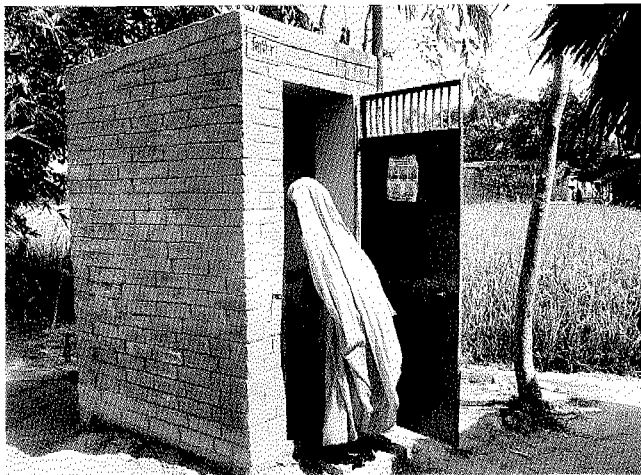
^
A courtyard is covered with cowdung to keep it 'sacred' and 'antiseptic'

In some states, plinth-level latrines are provided as part of the ongoing sanitation programmes. The super structures are built by the villagers, according to their means

and pregnancy at times adding to her discomfort.

The resulting defiance of nature's call throughout the day often leads to diseases such as urinary tract infection.

Often, her husband is unaware of her problems in this regard as it is considered unbecoming to discuss them at all.



her home.

Besides, fear of molestation demands that she goes in a group.

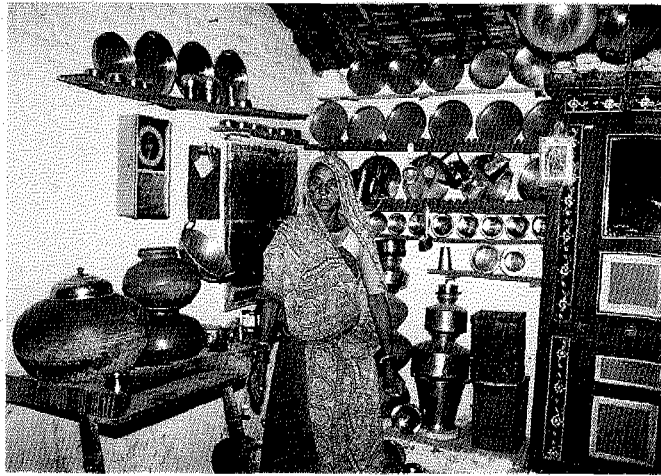
Then, again, the increase in population within villages reduces her access to places of privacy, with menstruation

Recent surveys not only reveal the rural woman's preference for installation of sanitary latrines, but also show her desire to improve the hygiene and sanitation needs of her family as well.

Woman's role in water and sanitation

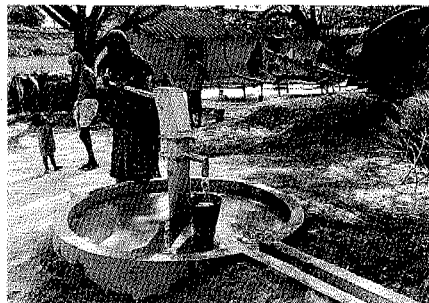
Woman's traditional association with the use and management of domestic water makes her the ideal choice for spearheading projects related to water and sanitation.

Her planned and organised participation can contribute significantly to the efficiency and effectiveness of water supply schemes.



△
Through her knowledge of household cleanliness, this woman can spread health and hygiene awareness among the community

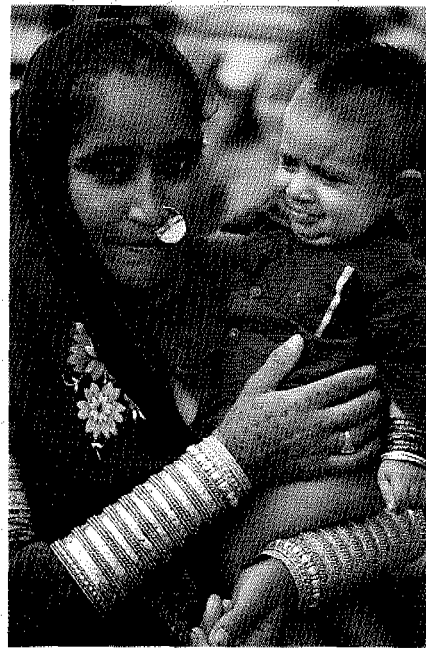
At the same time, she can influence community participation and bring about sustainability of the projects — not as a passive beneficiary of water and sanitation projects, but as an active



partner in its policy-making and implementation.

Woman — the guardian of health and hygiene

Woman plays a pivotal role in the health and hygiene of her family and community.



At home, she tends the sick and educates her children with regard to sanitation and waste disposal, guiding them in their personal habits and practices.

Very often, her knowledge and practise in these matters influence the community at large.





The Indo-Dutch Water Supply & Sanitation Programme

The Indo-Dutch Water Supply & Sanitation Programme, started in 1978, aims to improve water supply and sanitation conditions in rural India.

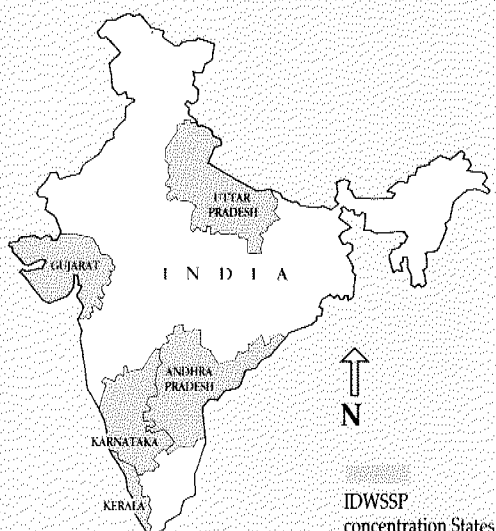
Working in close co-operation with the Indian Government and various local bodies, it actively promotes projects and extends financial assistance to ensure potable-water supply and hygienic sanitary conditions.

Today, this project is part of a programme with strong social objectives.

Objectives that actively involve women. And, through women, the community.

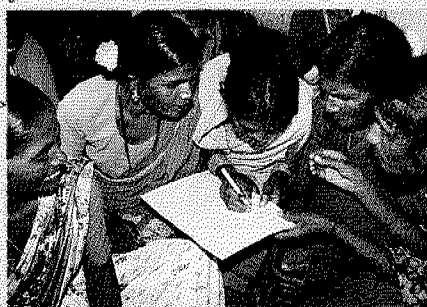


The concentration areas for the programme are presently Andhra Pradesh, Gujarat, Kerala, Uttar Pradesh and Karnataka — each state with its own unique problems related to water and sanitation.



Population	: 844 million
Rural Population	: 627.1 million
Sex Ratio	
Literacy	
Population below poverty line	
Female workers' participation	
Source: 1991 Census	

Functional literacy plays an important part in women's empowerment



Principles of the Water & Sanitation Programme

The Indo-Dutch bilateral water supply and sanitation programme is based on the following principles:

- **An integrated approach to development**

Improvements in water supply should be linked to improvements in sanitation, drainage, solid waste disposal and hygiene behaviour with the help of the local people.

- **User participation**

Community participation should particularly involve women in every phase of the project — i.e. preparation, implementation and evaluation.

- **Economic sustainability**

Low-cost and appropriate technologies should be encouraged. Local production should be stimulated. Recurring costs should, in principle, be recovered locally.

- **Sustainability**

Institution building at the grass-root level should be initiated and supported. Transfer of knowledge should be pursued.



वंधुतेकी

सुशीलादेवी

Community participation :



getting together to make water projects work

No potable-water project can succeed by technology alone.

For its sustainability, it needs the participation of people.

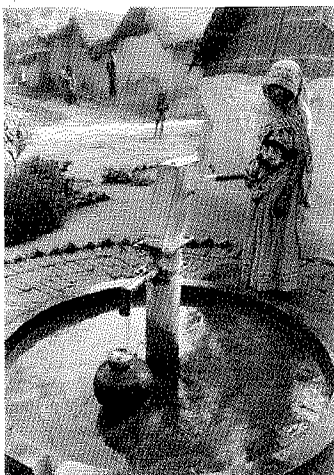
People working together as a community, heedless of sex, caste or creed.

People who will share the responsibilities of ideas, labour, material procure-

ment, decision-making, solution-finding and maintenance.

People who know the hazards of water pollution and are familiar with the difficulties of ensuring a regular supply of pure drinking water.

People who realise that pure water is scarce and will use it with wisdom.



Mere technical implementation of water supply facilities is not enough to sustain them; only a sense of belonging can help in maintaining these like the water point on the left, while negligence and improper use can result in slushy, unhygienic conditions as on the right

We can !



Women in Indo-Dutch water & sanitation projects

With women so closely linked to water and sanitation, it is natural that they be the focus of any programme related to these two vital elements.

We pledge !!



All Dutch-assisted water supply and sanitation projects in India are sensitive to women's needs, aiming to improve their overall status in society.

We do !!!



**Woman :
a vital resource in ...**

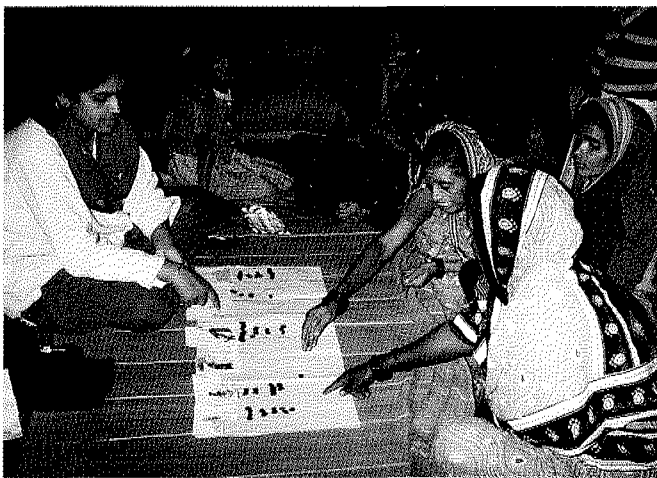
social mapping

In local matters, woman's knowledge is unique.

She knows of the various water sources in the vicinity, their location and reliability.

She is aware of the preferences pertaining to water usage and waste disposal.

She understands well the demographic composition of the community.



△
A social mapping session in progress in Karnataka

All these qualify her for discussing matters crucial to water and sanitation.

For finding local solutions to local problems.

For identifying ideal sites for water points.

For implementing and maintaining water and sanitation systems.

For deciding what is best for her, for her family, for the community.



△ *A health promotion camp in Andhra Pradesh*

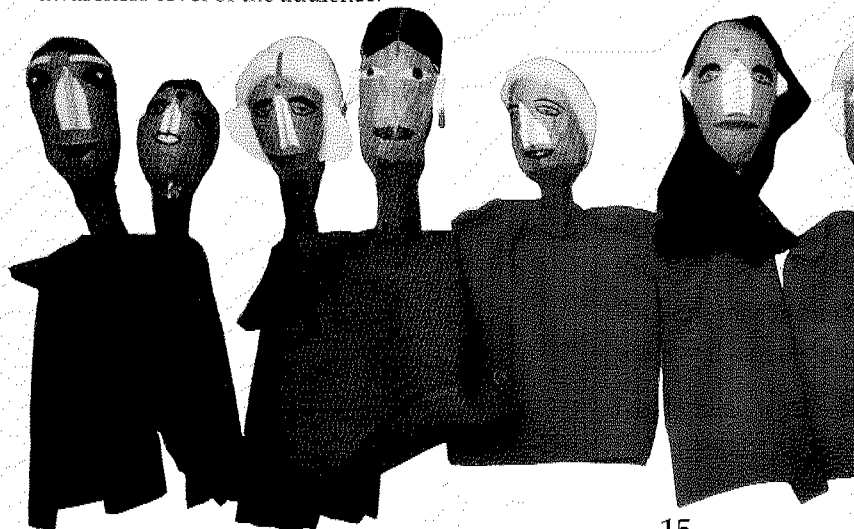
health promotion

Indo-Dutch water supply projects are backed up with intensive health and hygiene promotional activities to make each project fully effective.

Health and hygiene are promoted through innovative, people-oriented packages, implemented through local functionaries and intermediaries, in which woman plays a vital role.

The package includes group discussions, simple demonstrations, plays, slide shows, poster displays and puppet shows.

Topics chosen depend on the awareness-level of the audience.



local committees

The local committee takes care of operation and maintenance of water points, including minor repairs.



Known in different states as *Jal Samitis*, *Pani Panchayats*, *Ward Water Committees*, etc., local committees must have some female representation.

Women with leadership qualities are encouraged to join and ensure the proper use and functioning of water supply facilities in the villages.

Apart from being guardians of the water points, the committees undertake preventive maintenance measures on a regular basis and create community-awareness regarding environmental sanitation.

operation and maintenance

Once a water point is set up, the system is sustained by a caretaker — usually a woman identified by the water committee.

Each water point has a separate water committee and a caretaker to protect it from contamination and misuse.



The caretaker is responsible for keeping the surroundings of the water point clean, and for the upkeep of the water system — tightening the nuts and bolts, greasing the chains of handpumps, and disinfecting and chlorinating wells from time to time.



Local committee members monitor and maintain water and sanitation facilities

handpump repairs

When a handpump breaks down, it interrupts the supply of potable water, and women have to fall back on traditional, usually unsafe, sources.

With women from each community being trained as handpump mechanics, there is no need to depend on busy technicians who may take weeks, or even months, before a handpump is restored to working order.

construction & brickmaking

Armed with newly-acquired skills, the rural woman has found new areas of employment.

In Kerala and Uttar Pradesh, for instance, she has taken on the roles of brickmaker, construction worker and mason. Roles that are helping in the construction of standposts and latrines, and better sanitary conditions.

Women masons in Kerala



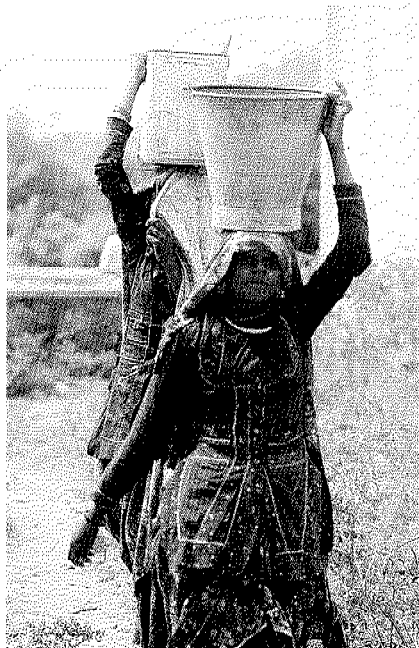
Emergence of a woman empowered

She has emerged from her cocoon, bold and confident — overcoming her lack of formal education and the prejudices of tradition cutting through all cultural resistance stepping into new roles with ease.

This is the new rural woman, empowered by her new-found knowledge and skills.

It is she who gives sustenance to India's water supply and sanitation systems.

Construction workers in Gujarat

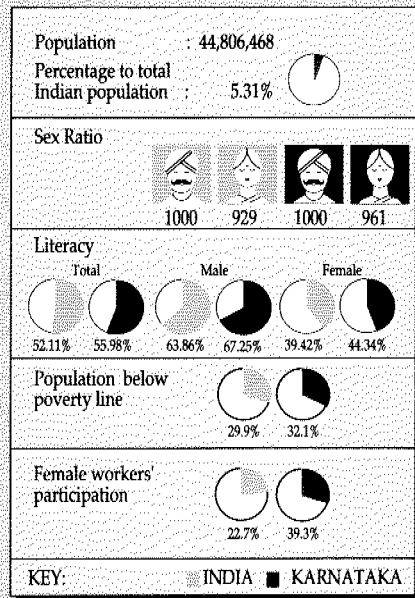


Women handpump mechanics from the Tharu tribe of the Lakhimpur-Kheri district in UP



The following pages indicate how DAC/WID Policy is put on an operational footing.

The sequence of states has not been placed in chronological order of implementation, but rather to highlight certain aspects of DAC/WID Policy.

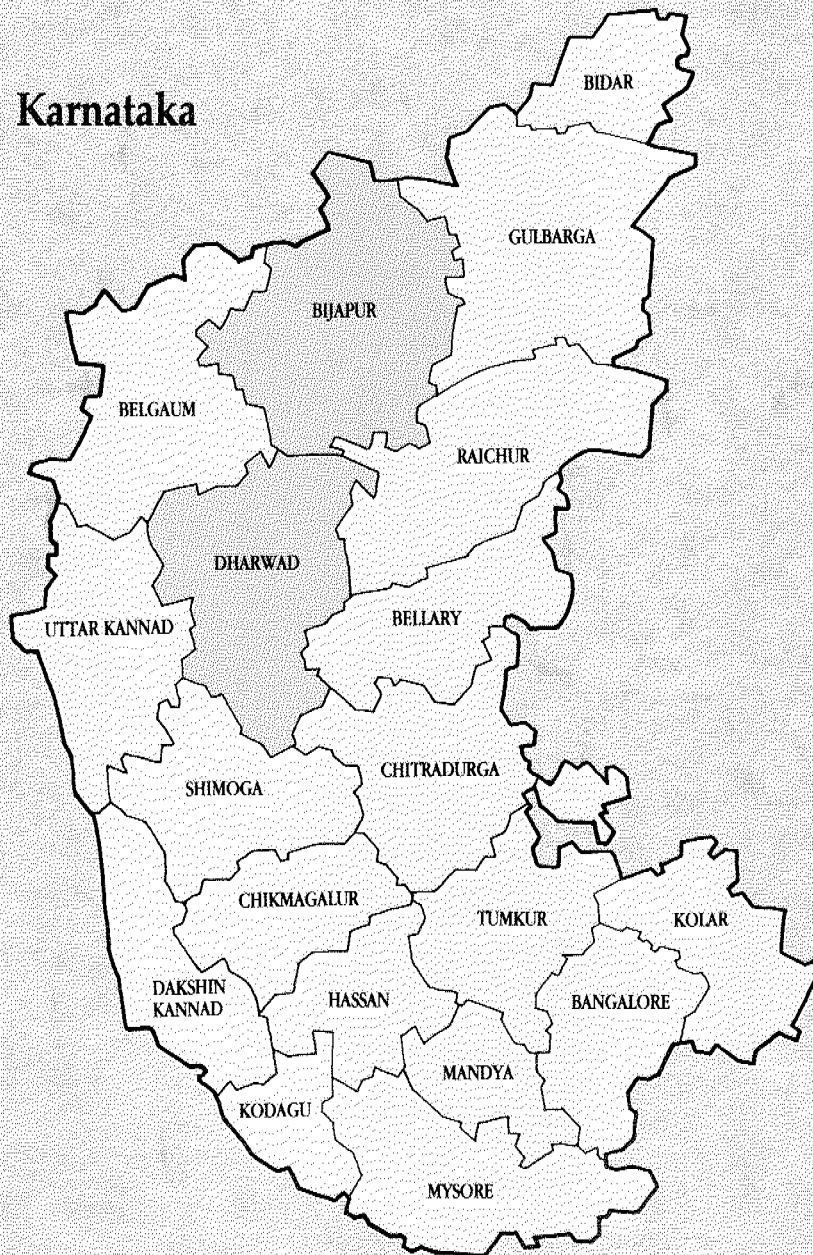


Important features of project areas

District	Area (sq. km)	Population	Density (in h.p.sq.km)	Urban Population	No. of Talukas
Dharwad	13,700	2,945,000	214	35.2	17
Bijapur	17,100	2,400,000	141	24.1	11
State	191,800	37,136,000	194	28.9	

Water Problems	District	
	Dharwad	Bijapur
	Name of Talukas	Name of Talukas
Brackish	Navalgund, Nargund, Ron, Kundgol, Haveri, Savanur, Byadgi, Ranebennur	Bijapur, Jamakhandi, Basavana Bagewadi, Mudhol, Bagalkot, Badami, Muddebihal
Scarcity	Dharwad, Hubli, Kalghatgi, Gadag, Shiggaon, Hangal, Haveri, Savanur, Byadgi, Hirekerur, Ranebennur	Indi, Sindgi, Bijapur, Bilgi, Mudhol, Badami

Karnataka



- IDWSSP concentration States
- Location within India
- Project districts

Karnataka



The Karnataka Integrated Rural Water Supply and Sanitation Project is the youngest Dutch-assisted water supply and sanitation project in India. Here, technical and social aspects were integrated at the planning stage itself — a unique feature of the project.

DAC/WID criteria are an integral part of all Dutch-assisted development programmes in Karnataka

All technical components are implemented by the Public Health Engineering Department of the Government of Karnataka, while the Bureau of Health Education and Training and the Department of Health and Family Welfare is responsible for health education, training and building community-awareness, as initiated by the Dutch consultant, Bongerts, Kuyper and Huiswaard.

Initially, two of the northern districts

of Karnataka (Dharwad and Bijapur) fall under the purview of the project. Both districts suffered from unsatisfactory water supply (qualitatively and quantitatively) and poor living and environmental conditions.



The water and sanitation scenario

The main water sources for Dharwad and Bijapur's villages are borewells, tanks, rivers and, in a few cases, irrigation channels or open wells.

Groundwater from borewells is the only 'safe' water in about half the project villages, with no treatment facilities available for water from other sources.

Most villages with unpalatable brackish groundwater and water with high fluoride content rely largely on polluted, guinea-worm infected surface water sources.



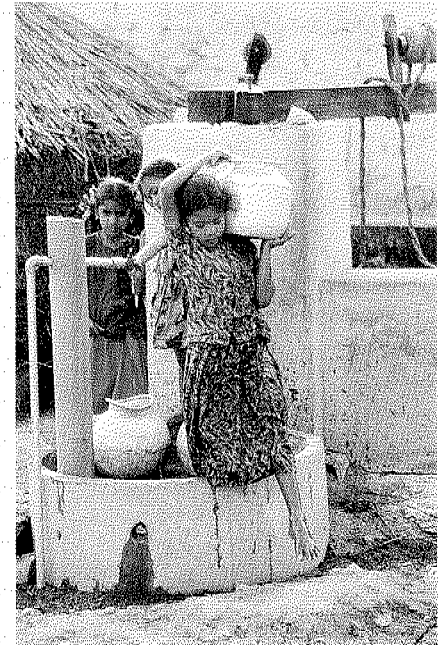
Most of the villages have poor sanitation standards and environmental conditions owing to physical, socio-economic and socio-cultural factors. Together with the contaminated water, these lead to various water and waste-related diseases.

Use of water

In Dharwad and Bijapur's villages, water use differs significantly with caste and affluence, with wealthier households using more water than others. Use of water is also determined by availability, continuity of supply and distances from the water sources. Water is also used at source.

The villages are traditionally structured, with the upper and middle castes and the Muslims living in the core, and the *Harijans* in the periphery. There are a large number of Scheduled

Caste and Scheduled Tribe people and other displaced persons from tribal or hilly regions living in the outskirts of the villages. They are the most underprivileged, the most in need of assistance.



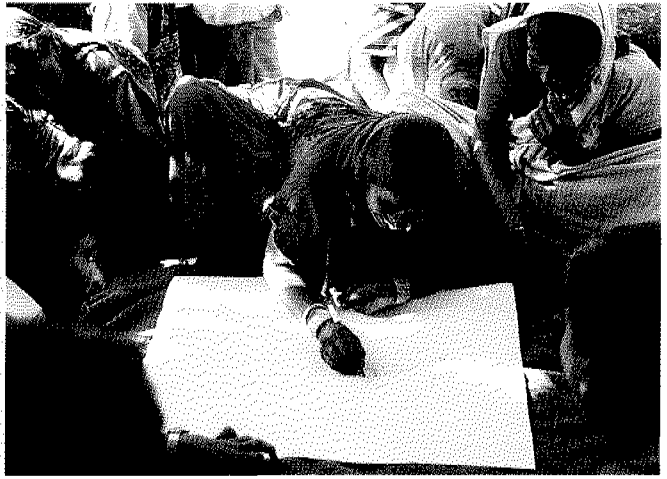
Quantity of water used for different domestic activities

WATER STATUS	PROBLEMWISE & CASTEWISE PER SAMPLE HOUSEHOLD										
	ACTIVITIES ► CASTE ▼	WASHING VESSELS	COOKING	BATHING	CATTLE	WASHING CLOTHES	DRINKING	WATER TO FIELD	OTHER ACTIVITIES	FAMILY SIZE	TOTAL POTS
SCARCITY	HIGH	●●	●●	●●●●●●●●	●	●●●●	●●●	●	●●	7	23
	MIDDLE	●	●	●●●●	●	●●	●●	●	●●	6	14
	LOW	●●	●●	●●●●	●●	●●●	●●●●	●	●●	7	21
	MUSLIMS	●●	●●●	●●●●●●	●	●●●●●●	●●●	●	●	7	24
FLUORIDE	HIGH	●●	●●	●●●●●	●●●	●●●●	●●	●●	●	5	21
	MIDDLE	●●	●●	●●●●●●●●	●●●●●●●●	●●●●●●●●	●●●	●	●●●	8	34
	LOW	●●	●●	●●●●●●●●	●●●●●	●●●●●●●●	●●●	●	●●	9	30
	MUSLIMS	●●●	●	●●●●●	●	●●●●●	●●●●	●	●●	6	22
BRACKISH	HIGH	●●●	●●	●●●●●●	●●●	●●●●●	●●●	●●	●●●	6	27
	MIDDLE	●●●	●●	●●●●●	●●●●●●	●●●●●	●●●●	●	●●	6	28
	LOW	●●●	●●	●●●●●	●●●●	●●●●●●	●●●●	●	●●	11	27
	MUSLIMS	●●	●●	●●●●●	●●●●●	●●●●	●●●	●	●●	7	24
CONTROLLED	HIGH	●●●	●●●	●●●●●●●●	SURFACE WATER USED	●●●●●	●●●●	SURFACE WATER USED	●●	5	27
	MIDDLE	●●●	●●	●●●●●		●	●●●●		●●	7	17
	LOW	●●	●●	●●●●●		●●●●	●●●		●	6	17
		● = 12 LITRES OF WATER									

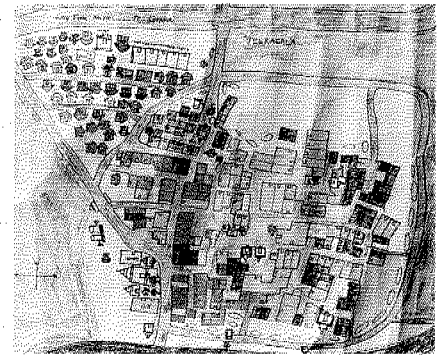
Social mapping

The project staff have innovated novel and ingenious social mapping techniques with the help and participation of the village women. This is carried out simultaneously with final source selection activities.

Helped by project staff, the women prepare maps of their villages showing existing and suggested water points. They also employ visual aids to prepare demographic, economic and social maps of their villages and to compile health statistics pertaining to water quality of various water sources.



△
Local women engaged in social mapping and the result of their efforts





The scene in hygiene

Health and hygiene awareness surveys in Dharwad and Bijapur's project villages reveal a general awareness regarding the needs for cleanliness, pollution control and health. These, though, are founded on religious and traditional beliefs, and bear little or no relationship to health and hygiene needs.

Moreover, the all-pervasive caste system and caste-related concepts of cleanliness impose limitations on social behaviour, particularly with regard to the collection and use of water.

Visible cleanliness in the house is a must, but this cleanliness ends at the limits of the household premises.

In general, Dharwad and Bijapur's villagers do not consider open-air defecation to be a health risk, and it is only some women who feel the inconvenience and lack of privacy. In 21 Dharwad villages, women use enclosed, open-air community defecation areas specially set aside for them.



Knowledge, Attitudes, Practices

The lack of education, knowledge and civic sense, and the influence of misconceptions, superstitions and religious beliefs of the villagers are reflected in the poorly maintained environment, tanks, wells and handpumps. Hardness, sweetness and clarity of water is more important than its purity.

The sanitary latrine is to them an alien, urban phenomenon, and the space used for bathing in their houses is often a part of the space set aside for cooking.

Promoting hygiene

The Hygiene Promotion Programme develops awareness regarding the relationship between water, sanitation, health and hygiene.

An integrated approach helps inculcate in the people the need for proper water usage and sanitation facilities.



△ Social scientist with villagers ▷



Community participation

Representative village committees are set up to identify possible sites for water points, to maintain installed water points and their environments, and to help sustain the project.

Women's involvement is an essential part of community participation.

Mobilising women

Women are actively mobilised, and their opinions used in preparing action plans and in studying and analysing

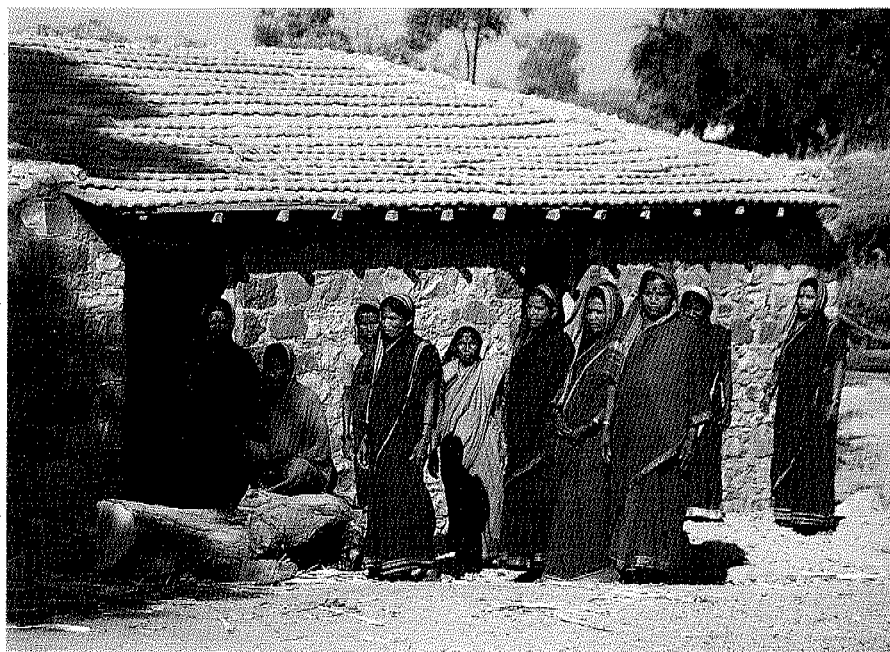
Village committees

A village committee monitors and sustains the project.

Its members are equally represented by all sections of the village community, irrespective of sex, caste and creed.

Organising and training

Training is provided to all involved in the project, including members of the village committee, with special emphasis on the participation of women. It covers areas like project



◁ 'Mahila Mandal' members proudly stand outside their office — a labour of love built with their own hands

It is expected that the benefits of modern water supply systems reaching Dharwad and Bijapur will have an impact on the health of its people and on its environment.

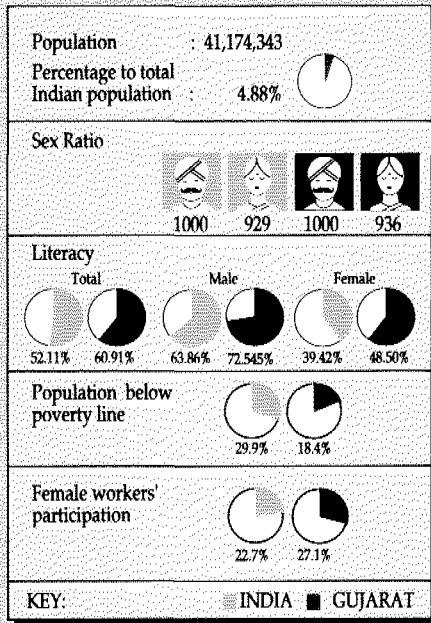
needs for facilities at the household level. Active participants in the project are appointed community managers, village committee members, office bearers in other implementing bodies, project village workers, village health and hygiene workers, environmental caretakers and water supply scheme operators.

orientation and management, implementation, operation and maintenance of water supply schemes, and also other community-based activities.



▷ A hydro-geological survey being carried out

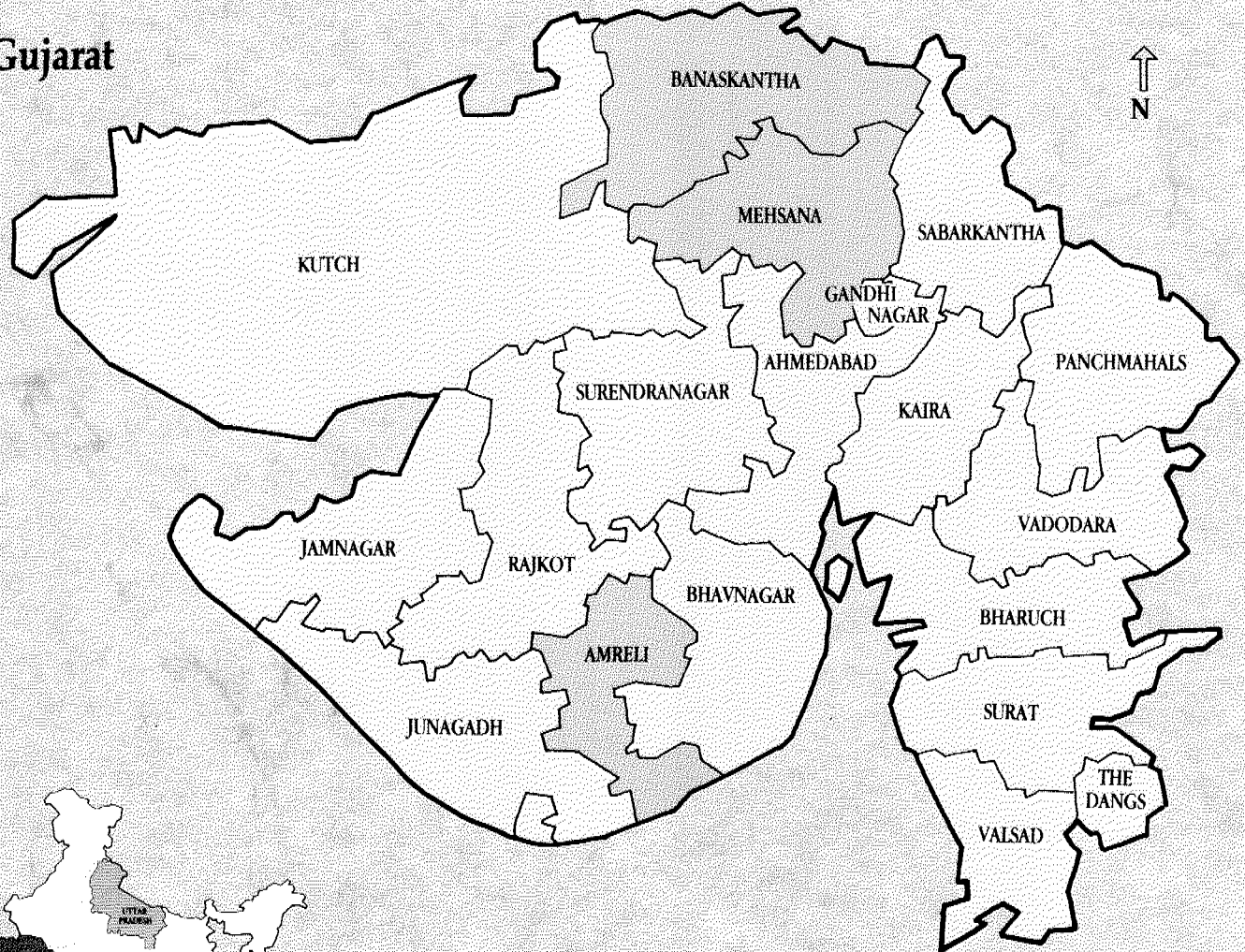




Salient features of Projects in the State

Scheme	District	Taluka	No. of villages covered	Water problem
1a. Santalpur Regional Water Supply Scheme (SRWSS)	Banaskantha	Santalpur, Radhanpur, Kankrej	72	Scarcity
1b. The Santalpur Extension II Scheme	Banaskantha	Radhanpur	76	Scarcity
2. Sami-Harij Water Supply Scheme (SHWSS)	Mehsana	Sami & Harij townships	111	Scarcity & salinity
3. Lathi-Liliya Regional Water Supply Scheme (L.LRWSS)	Amreli	Lathi & Liliya and Jamnagar township	36	High fluoride content

Gujarat



- IDWSSP concentration States
- Location within India
- Project districts

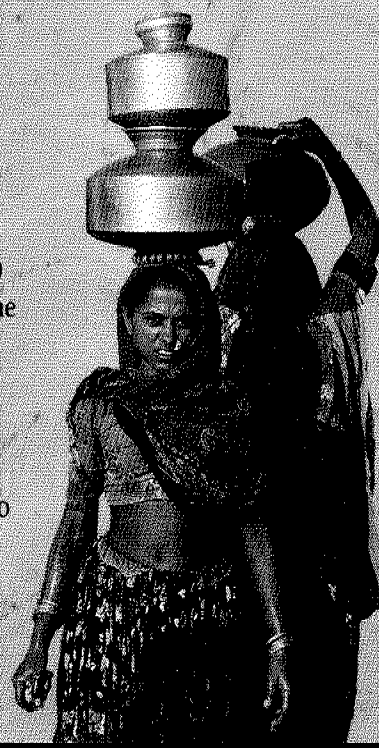
Gujarat



The Indo-Dutch drinking water supply and sanitation programme was initiated in Gujarat to relieve the acute water scarcity resulting from frequent failure of the monsoons, coupled with repeated drought. Implemented in 1978 with the assistance of the Gujarat Water Supply and Sewerage Board (GWSSB) the project covers the districts of Banaskantha, Mehsana and Amreli.

Gujarat Water Supply and Sewerage Board (GWSSB)

Apart from building the physical infrastructure of the Santalpur Regional Water Supply Scheme (SRWSS) in Banaskantha, GWSSB introduced the participation and involvement of the villagers. At each village, a branchline committee was appointed to ensure regular and timely availability of water, and attend to all work related to maintenance and repairs — especially of storage facilities.



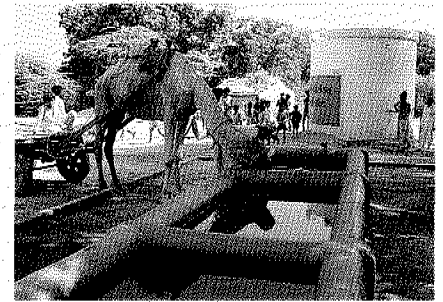
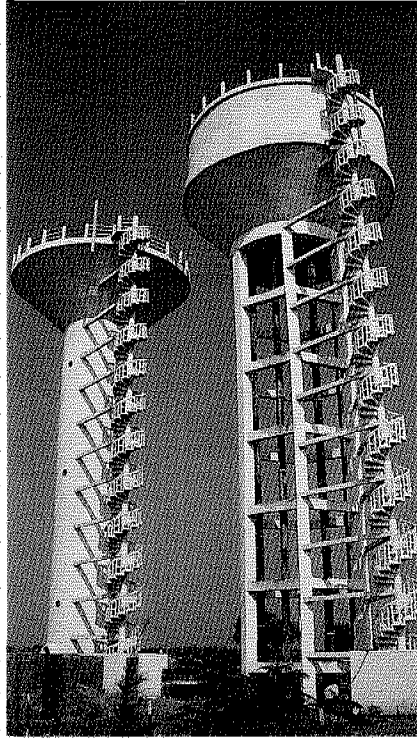
The implementation of social components was aided by the Self Employed Women's Association (SEWA), the Centre for Health Education Training and Nutrition Awareness (CHETNA), the Foundation of Public Interest, the Bhansali Trust and ICDS. These agencies helped in empowering women and giving them confidence regarding their physical, economic, political and socio-cultural capabilities.

Pani Panchayats under SRWSS

A *Pani Panchayat* assumes and exercises total control over all facilities related to drinking water supply at every village covered by the SRWSS.

The *Pani Panchayat* also promotes hygiene and sanitation practices among the villagers.

A *Pani Panchayat* is formed with the *sarpanch* or deputy *sarpanch* as its chairman, two women members, two men members and a linesman or a lineswoman.



△ A 'havada' or cattle trough

△ Members from various communities get together to form 'Pani Panchayats'

Banaskantha : a land without water

Banaskantha is a desert region with a high level of poverty. Without water for irrigation, its lands remain uncultivated, and without adequate fodder, the milk producing capacity and health of animals suffer. Scarce rainfall and frequent droughts have often led to the forced migration of its people.

SEWA

The Self Employed Women's Association (SEWA), based in Ahmedabad, is exclusively a women's organisation for implementation of women's development programmes.

Under Dutch assistance, SEWA has been working in Banaskantha since 1988, lending support to the water supply and sanitation programme. Its major focus is on stabilising population in drought-prone areas by encouraging women to take up leadership roles in community water supply and sanitation programmes.

Eco-regeneration programme

One of the schemes taken up under eco-regeneration is the development of nurseries and plantations in Banaskantha. It has assumed importance due to :

- the resulting ecological regenerative activity,
- the assured market for nursery saplings,
- the high off-season, but full-time, employment potential.

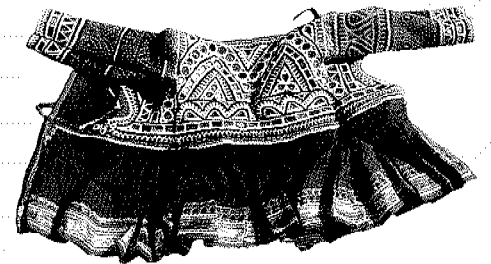
Owing to water scarcity, SEWA first selected villages with alternative water sources, like *panchayat* or private borewells, where it did preparatory work.



Programme for artisan support and craft development

SEWA provides effective support to Banaskantha's craftswomen. It has formed a special craft development centre to help develop the local skill base, and mobilise resources to meet the working capital requirements of artisans.

SEWA has organised the women into DWACRA groups, registered with the District Rural Development Agency (DRDA). They are exposed to market conditions and taught to compete and combat the exploitation of private traders.



◁ Eco-regeneration helps in the greening of desert areas and provides a source of income for rural women



SEWA's low-cost fodder security system ensures a regular supply of fodder for cattle



Dairy farming and fodder security system

Santalpur and Radhanpur's dairy farmers suffer from acute shortages of fodder.

Provision of water troughs for cattle by the SRWSS has led to the revival of milk co-operatives, increased income generation for dairy farmers in Santalpur's villages, and the re-activation of a chilling plant at Radhanpur.

SEWA has helped evolve a low-cost fodder security system by forming co-operatives.

Some of these co-operatives are run exclusively by women, and provide insurance coverage for many of their members.

A milk collection centre at one of the many milk co-operatives



Checking the fat content in milk samples

Salt producers' co-operative

In 1991, SEWA helped form the first ever women salt producers' co-operative for full-fledged production of salt.

SEWA also formed a mobile health unit for co-operative members and



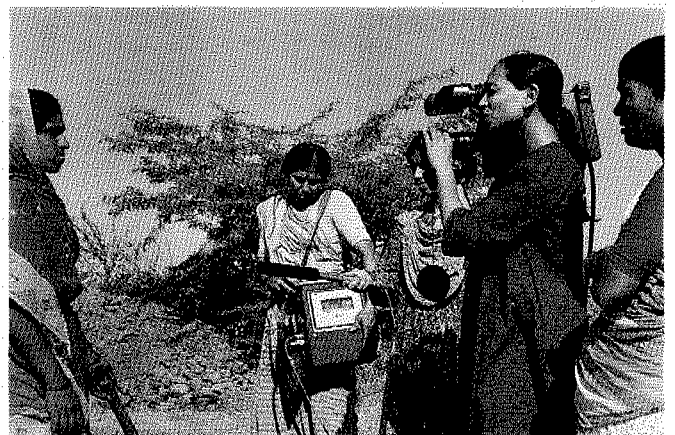
arranged for their life insurance coverage.

Members of the first ever salt co-operative organised exclusively by women

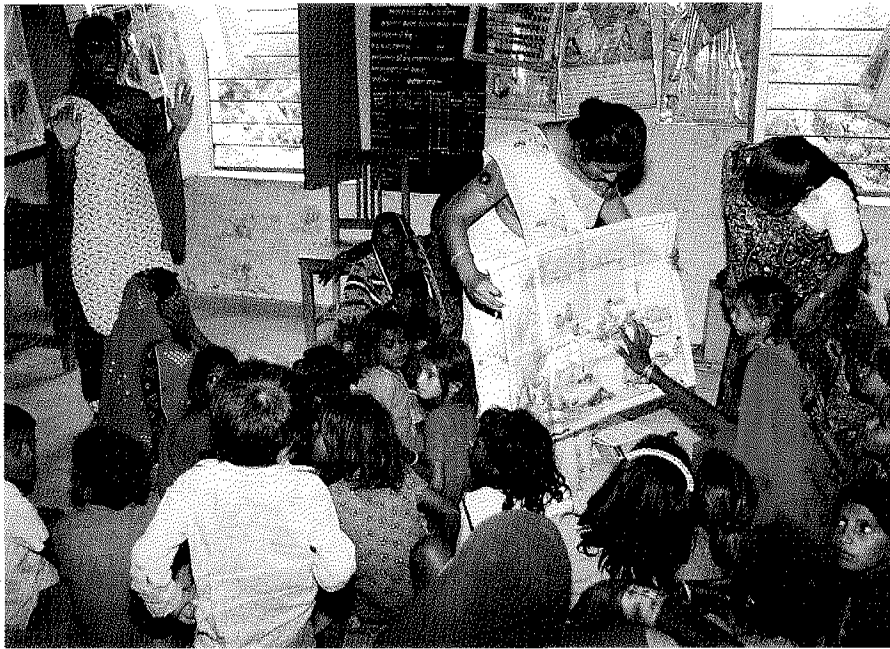
Video SEWA : agents of change

Communication is a major tool for SEWA in mobilising rural women. SEWA's own video-filming unit comprises a group of women, some previously vegetable sellers.

For SEWA, video is not merely a means for documentation, but a catalyst for social change. The women filmmakers



have built up a good rapport with village women, preparing several programmes on women's development, literacy, self employment, etc.



CHETNA

Under the Indo-Dutch Water Supply and Sanitation Programme in Banaskantha, the Centre for Health Education Training & Nutrition Awareness (CHETNA) has been implementing a water awareness programme for village women on the basis of in-depth studies and the geo-climatic conditions of the district.

CHETNA aims at consciousness-raising with regard to water-borne and water-bred diseases.

It encourages women to develop leadership qualities. To participate in water supply and sanitation programmes. To voice their demands and interests with regard to water and sanitation. To claim seats in the *Pani Panchayat* and other institutions.

CHETNA believes that participation is the key to effective communication with rural people and of fundamental importance in their learning process.



CHETNA's communication package includes group discussions, role plays, physical demonstration of water quality through aids such as microscopes, use of visual aids like posters and use of songs with health messages.



△ *Social scientists regularly interact with the local population*

Village-level health camps

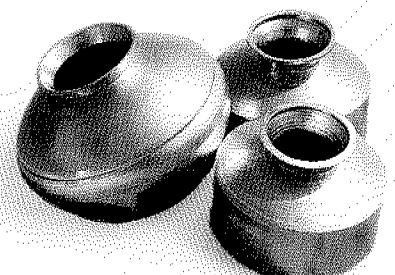
CHETNA started its activities by organising two village fairs at which the findings of a KAP study were made known to a large cross-section of village women. Village-level health awareness camps are based on the results of these village fairs. During the course of these camps, women selected, among themselves, some of the more enthusiastic and motivated ones to organise monthly discussions on health-related issues pertaining to water in villages.

Empowerment through knowledge

One of the important aspects of these camps was the introduction of gynaecological problems. Young girls were made aware of female physiology, the mechanisms of menstruation, conception, childbirth and the importance of personal hygiene.

Misbeliefs and myths about the body's functions were dispelled, and the knowledge gained has helped empower the women of Banaskantha. Enabling them to understand and take care of themselves better.

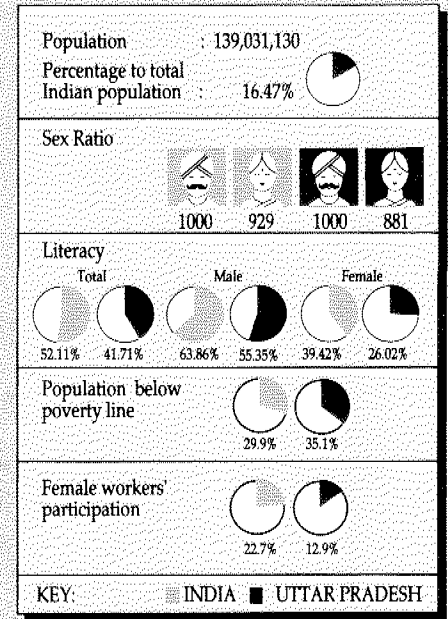
Slowly, CHETNA has initiated a long-felt need to improve rural women's health needs through exposure and knowledge that will, hopefully, serve as a model for other regions to follow.



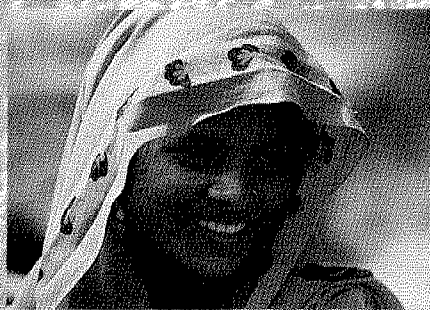
Projects at a glance

Project	Districts	No. of Villages/ Rural Towns	No. of Schemes
Sub-Project I Piped water supply	Rae-Bareli, Varanasi, Allahabad	722	22 schemes
Sub-Project IA * Piped water supply	Rae-Bareli, Varanasi, Allahabad	653	20 schemes
Sub-Project III Handpump installation	Mathura, Agra, Mainpuri, Etawah Farrukhabad, Allahabad	537	5268 handpumps
Sub-Project IV Piped water supply	Allahabad, Varanasi	250	13 schemes
Sub-Project V Rural sanitation	Rae-Bareli Varanasi	46	13421 household sanitary latrines 44 school latrines and 44 tank type stand post in schools
Sub-Project VI Handpump installation	Lakhimpur-Kheri, Bahraich, Gonda, Ballia, Basti, Siddarthnagar	1483	13600 handpumps
Sub-Project VII * Piped water supply	Almora, Meerut, Bulandshahr, Etawah, Mainpuri, Firozabad, Bareilly	156/10	10 schemes
Sub-Project VIII * Handpump installation	Gaziabad, Badaun, Moradabad, Unnao, Kanpur, Dehat, Ballia	2505	19367 handpumps

*forthcoming



Uttar Pradesh



In 1978, the Indo-Dutch Water Supply and Sanitation Programme was initiated in India's most populous state — Uttar Pradesh. Today, it is the largest Dutch-assisted water supply and sanitation project in India.

The Project was initially technical in nature, with the Uttar Pradesh Jal Nigam (UPJN), a state government undertaking, as the main executing body for building the necessary physical infrastructure.

As development work progressed, it was complemented with social action, and a Programme Support Unit (PSU) was established in 1988, in Lucknow.

Outside the Indo-Dutch Water Supply & Sanitation Project, a similar activity to operationalise WID Policy was introduced in the Indo-Dutch UP Tubewells Project (IDTP) and the Indo-Dutch Environmental Sanitary & Engineering Project (IDESEP) in Kanpur and Mirzapur.

Water and sanitation scenario

Traditional water sources such as rivers, ponds and open wells in the State are often contaminated. Unhygienic transportation and storage facilities and a general lack of cleanliness in village households and their surroundings add to the degradation.

Unaware of the threat to their health and for the lack of proper water sources, villagers continue to use such water even for drinking.



Salient features of Indo-Dutch projects in UP

Proximity — Water points are usually set up within easy walking distance from village households.

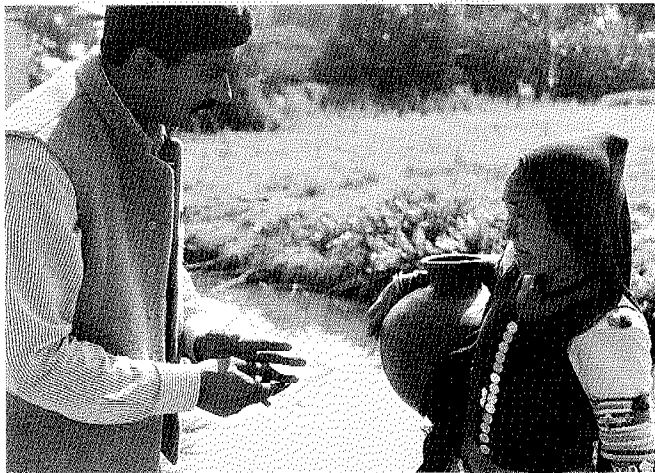
Appropriate site — Separate water points are set up in outreach areas.

Functional design — Each water point has a platform, a vandal-proof standpost and adequate drainage facilities.

Water quality testing — Laboratories have been set up to monitor water quality.

Waste-water disposal — To ensure proper waste-water disposal, drains and soak-pits are constructed. Tree planting and kitchen gardens have been encouraged for excess water absorption.

Sanitation — Sanitation programmes are implemented on a cost-sharing basis to ensure 100% coverage of the target villages. Sanitary latrines have also been provided in every village school.



Health promotion — Health and hygiene promotion activities have been integrated with the project.

Programme Support Unit

The Programme Support Unit (PSU) co-ordinates effective implementation

of the social components in various sub-projects of the programme.

Among other things, PSU aims to :

- involve women at all stages of project implementation.
- enhance the institutional capacities of the implementing agencies and local communities, with regard to participation.

Methodology

PSU utilises a network of social scientists and group organisers.



Social scientists, stationed at project headquarters, act as intermediaries between the community and implementing agency.

Involving village women at all stages of implementation, the social scientists help form *Jal Samitis* for each water point.

The *Jal Samiti* identifies articulate caretakers, generally women, for the preventive maintenance of water points and to ensure timely repairs.



members of a 'Jal Samiti'

Group Organisers, comprising local women, form a link between the village community and PSU. They undertake village contact drives, monitor the condition of water points and develop awareness among villagers regarding the need for environmental sanitation.



Grassroot workers use flip charts, puppets and modern audio-visual tools around which they weave stories with appropriate health messages.

School children are organised into *Jal Senas* to ensure cleanliness in their school premises and maintain personal hygiene. They also teach operation and maintenance trainees to read and write.

A water-point-cleaning drive organised by the 'Jal Sena'



Communication

Social mobilisation takes the form of interpersonal communication and group discussions.

People collectively work out local solutions to local problems. They express their thoughts and articulate their views.



△
Handpump mechanics

Health awareness

Health awareness camps and workshops are organised in co-operation with local health centres and village-based institutions.

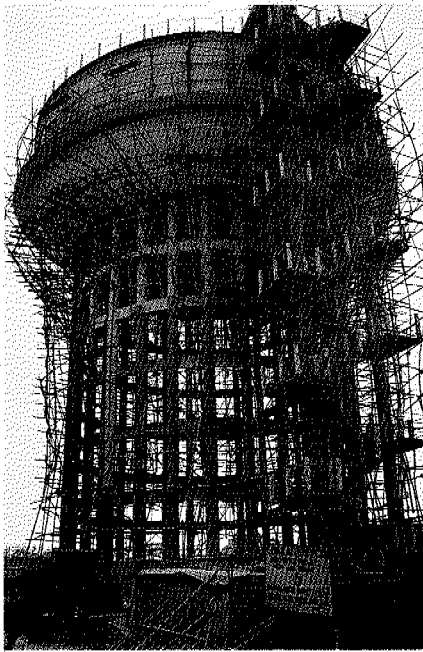
Handpump mechanics

Women in some parts of Lakhimpur-Kheri and Allahabad have been trained as handpump mechanics. Despite cultural inhibitions and social resistance, they have assumed an entirely new role in society.

While the benefit for the community might be functional, for the women themselves it means a heightened sense of empowerment, both in terms of income generation and the community's acknowledgement of their ability.

PSU's work is co-ordinated through regular meetings for planning, reporting, reviewing, follow-up and feedback.





Indo-Dutch Environmental & Sanitary Engineering Project (IDSEEP)

The Ganga Action Plan, formulated in 1981, aims to reduce and prevent pollution of the River Ganga.

IDSEEP is a part of the Ganga Action Plan implemented by the Ganga Project Directorate.

Though this Project is not included within the regular Indo-Dutch Water Supply & Sanitation Programme, it is dealt with here, together with the UP Tubewells Project, due to similarities in the operationalisation of WID policy.

Women making fibre-glass sanitary pans



Environmental sanitation

Apart from its basic objectives of pollution prevention and reduction, IDSEEP also aims at improving the environmental and living conditions of people by soliciting their active participation.

Gender transgressing work

To improve the poor standards of hygiene and the absence of potable water and sanitation facilities, women have to be viewed beyond their traditional roles. They must be trained to enter fields strictly considered male domains.

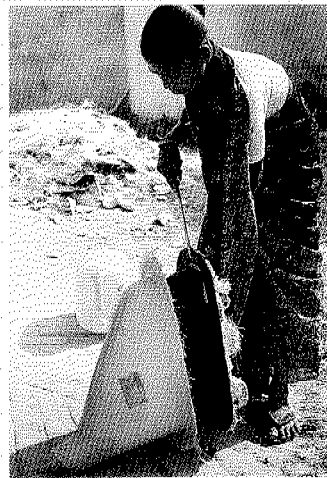


△ *Disconnecting an illegal water connection*

Training women plumbers

The idea to train women as plumbers was inspired by their easy access to households. Besides, this training could also be used to supplement their incomes.

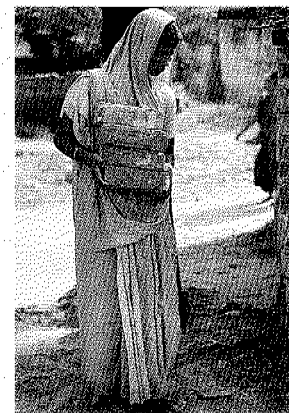
The programme was a concerted effort of several agencies. The Industrial Training Institute (ITI), Kanpur, provided support in developing the



training curriculum and literature, the Kanpur Jal Sansthan (KJS) provided engineers and plumbers in assisting training, and the UP Jal Nigam (UPJN) prepared actual job tasks of plumbers for the rehabilitation of water supply in Jajmau. Kanpur Nagar Mahapalika (KNM), the municipality, was the executive agency.

Women masons' programme

Under IDSEEP's skill-training programme, women construction labourers were trained in masonry work.



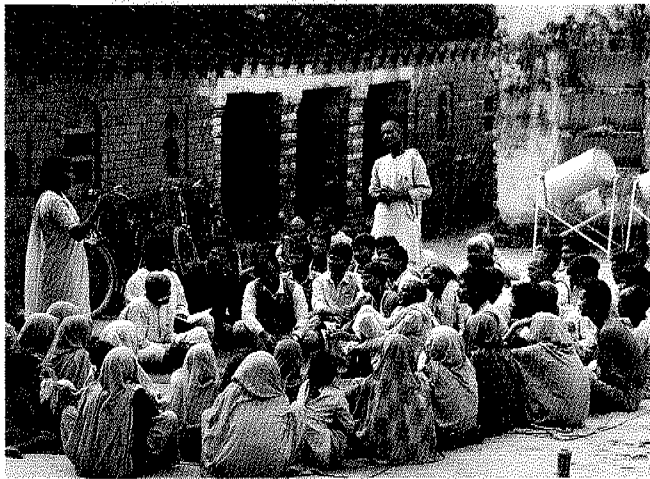
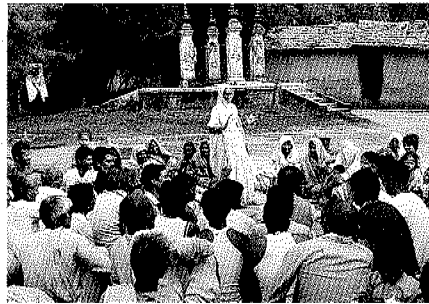
The sanitation component of the programme was a suitable entry-point for skill training, because its prolonged nature would give the women practical experience, confidence and credibility to take up work.

Women fibreglass-reinforced-plastic (FRP) fabricators

It is not uncommon to find women in unskilled, low-paid construction jobs, with the skilled work almost always reserved for men. To alter this situation, women were trained in skilled jobs relevant to the ongoing sanitation programme. This has resulted in a number of women taking up the fabrication of low-cost FRP sanitary pans and seats, thereby creating sustained employment for themselves.

Indo-Dutch UP Tubewells Project

The Indo-Dutch UP Tubewells Project (IDTP) started in 1988. The main objective of the Project was to augment agricultural production, and thereby improve the socio-economic conditions of farm households by providing water for irrigation.



△ A group meets to discuss ways and means of increasing agricultural productivity.

खेती की पैदावार बढ़ानी है।
तो मिट्टी की जांच करानी है॥

△
'To make the land more productive, first test the soil' is one of the many messages painted on village walls.

कृ.प्र.स.

Demonstrating the use of a pesticide spray △

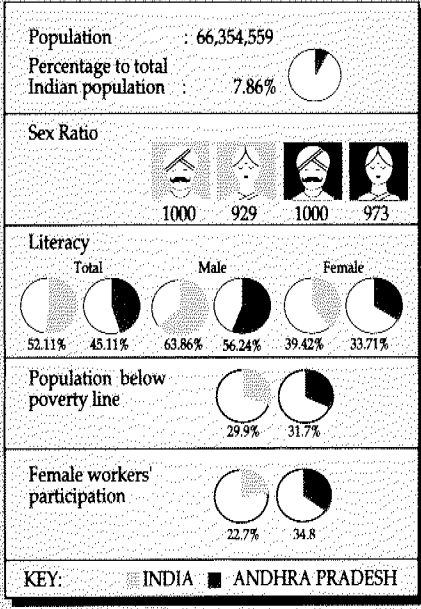


Women Agricultural Extension Programme

The Women Agricultural Extension Programme (WAEP) aims to guide and assist women farmers from small and marginal households in playing a major role in all agricultural operations. Extension services are rendered by women workers who perform various activities related to agriculture and rural development through active participation with farmers.

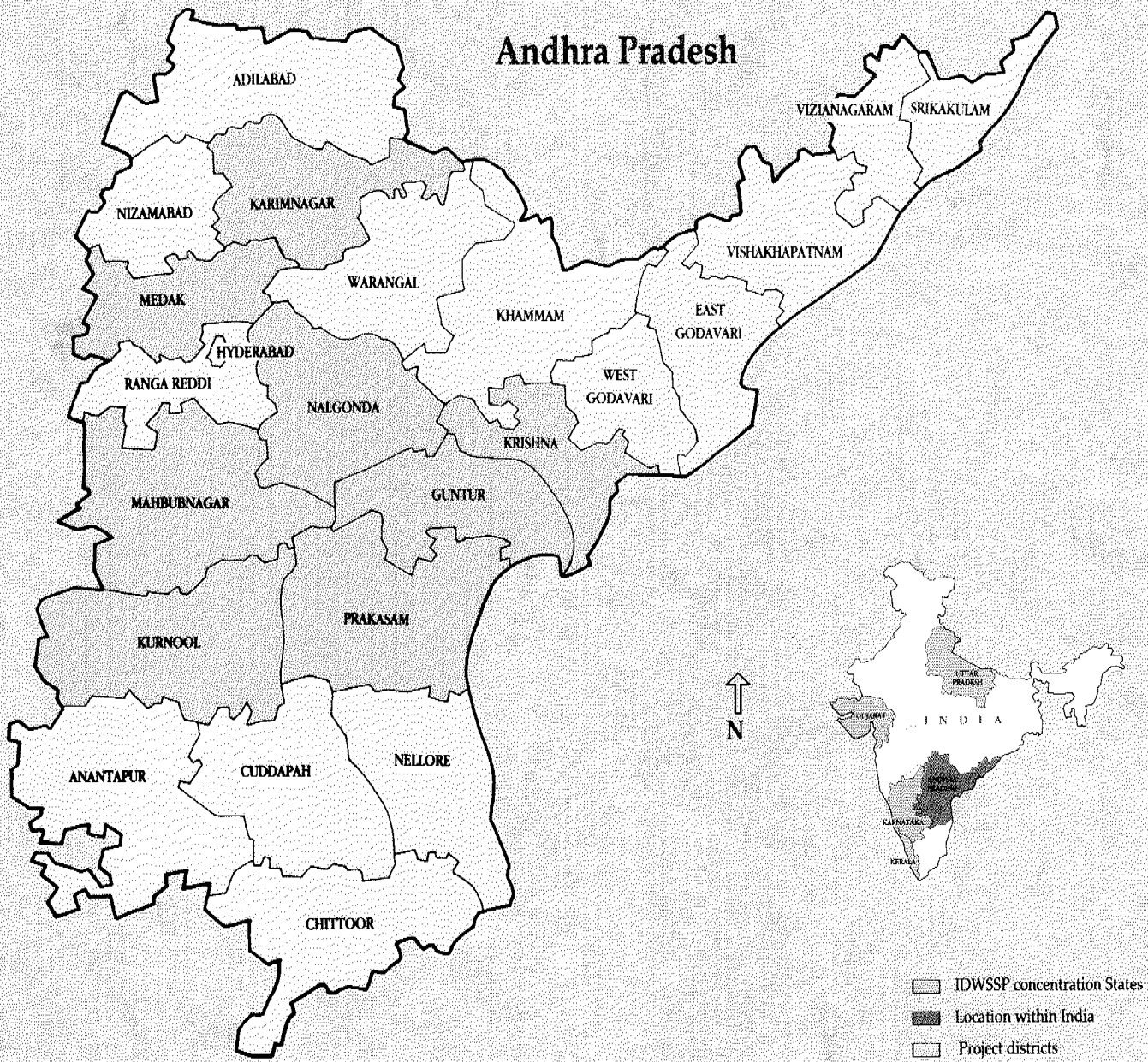
As facilitators, these workers bring village women into contact with existing governmental services, mobilise them for literacy programmes, provide assistance in the installation of smokeless *chulhas* (ovens) and organise extension activities in the field of rural sanitation. They conduct health, family planning and immunisation camps, in collaboration with Primary Health Centres (PHCs). Veterinary services for cattle, in collaboration with the Department of Animal Husbandry are also organised.





The combined coverage of API and APII Projects

Districts	No. of API villages	No. of APII villages	Total No. of villages
Guntur	21	-	21
Karimnagar	3	-	3
Krishna	6	-	6
Kurnool	2	64	66
Mahbubnagar	-	36	36
Medak	-	118	118
Nalgonda	14	-	14
Prakasam	155	70	225
8 districts	201	288	489



Andhra Pradesh



The high fluoride content in the drinking water of rural Andhra Pradesh has led to a high incidence of fluorosis in certain parts of the State.

According to a State Government estimate of the early '70s, nearly 7,18,000 people in 6 districts of Andhra Pradesh were exposed to drinking water with a fluoride content exceeding the acceptable 1.5 ppm limit.

First phase : API (1978 - 1985)

This was a technical phase in which the main implementing agency was the Panchayati Raj Engineering Department (PRED), Government of Andhra Pradesh.

Later on, it was recommended that social components such as community education and participation be introduced in water and sanitation programmes. These recommendations were integrated in subsequent phases of work.





△ A victim of fluorosis

Second phase : AP II (1987 – 1991)

While PRED continued to be the main implementing agency, some of AP II's components were also implemented by semi-government bodies like the Andhra Pradesh Dairy Development Co-operative Federation, together with NGOs. A Netherlands Assisted Project Office (NAPO) was set up in Hyderabad in 1987 for day-to-day support and advice, as well as to co-ordinate NGO participation and facilitate inter-departmental communications. A district-level extension office was set up at Ongole in the Prakasam district.

Sanitation programme

The AP II sanitation programme is integrated with the State Government's own sanitation programme, 'Vimukti'.

▷ A health camp

Grassroot institutions

Within the programme, the help of a number of grassroot institutions are taken. Women's participation is encouraged through the Village Action Committee, comprising village elders, the *sarpanch*, school teachers, youth club members, postmen, representatives of PRED, etc.

Gram Panchayats are actively involved in the successful implementation of water and sanitation projects, construction of drainage systems, etc.

Public Standpost Committees assume the role of a caretaker committee and ensure proper user-education pertaining to water.

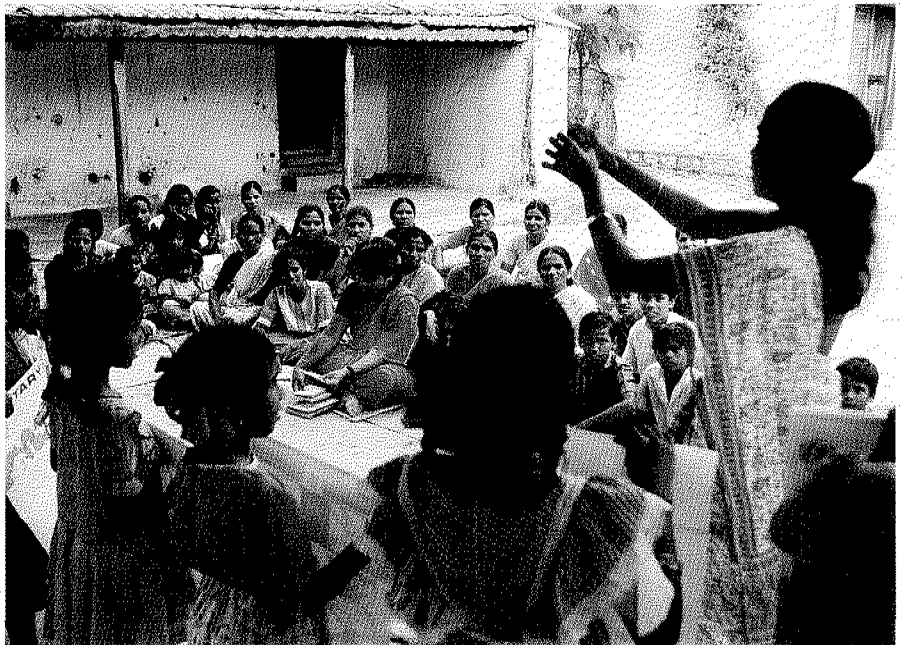


Community organisers

Articulate village women with leadership qualities, identified in project areas, are appointed community organisers to launch and promote the sanitation programme and persuade the villagers in matters of health and hygiene. The community organisers also help form School Health Clubs, Village Clubs, *Mahila Sanghams* and Village Action Committees with the help of *Gram Panchayat* members.



△ Community organisers set out on a mission to promote health and hygiene awareness



Communication team

A team of social communicators attached to the Ongole office assist the organisers in mobilising the community. Amongst others, a traditional form of musical entertainment called *Burrokatha* has been successfully used to relate stories about health, water and sanitation.



△
◁ An enthralled audience watches a 'Burrokatha' performance

A model of a well-planned village serves as one of the many communication aids



Income generation through dairy farming

One of the important aspects of women's involvement in AP II took the shape of All-Women Dairy Cooperatives. The implementation of water supply schemes helped bring water sources closer to their households. It provided opportunities for income generation activities such as dairy farming which could be effectively used not only to supplement household incomes, but also to provide additional nutrition for the family.

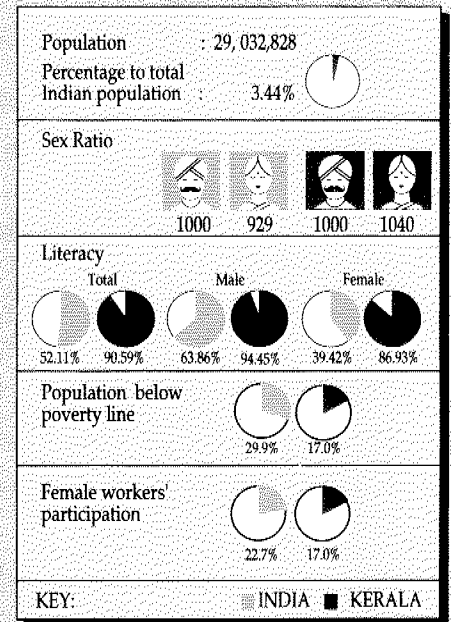
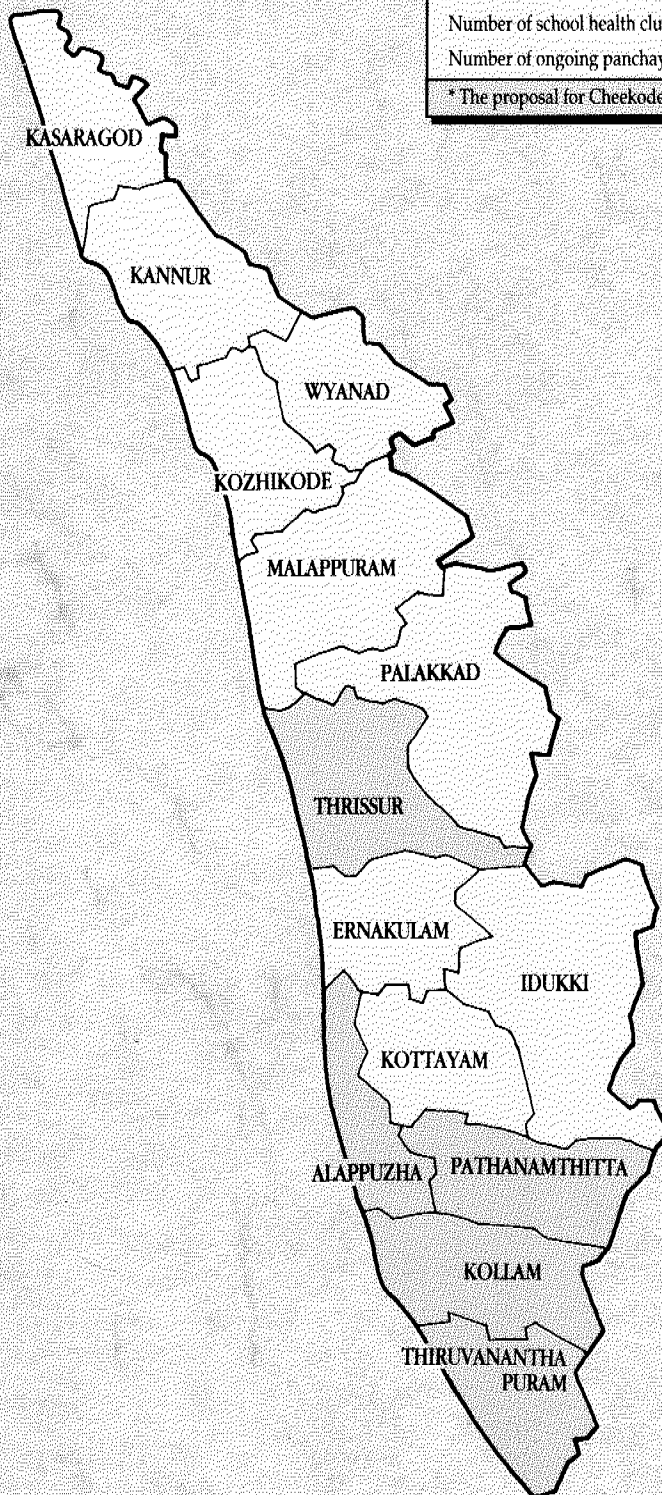


Kerala

SEU activities at a glance

Population covered	-	1.75 million
Number of water supply schemes	-	11
Number of panchayats	-	67*
Number of households	-	245,270
Number of Ward Water Committees (estd.)	-	470
Number of panchayats where taps located	-	41
Number of panchayats where maps have been prepared	-	41
Number of household latrines built	-	5296
Number of demonstration/institutional latrines built	-	67
Unit cost of latrine	-	Rs.1475 to Rs.2200
Number of school health clubs	-	23
Number of ongoing panchayat health/hygiene education activities	-	20

* The proposal for Cheekode Phase II, covering 7 panchayats, is in the preparatory stage



IDWSSP concentration States
 Location within India
 Project districts

Kerala



Kerala has the highest density of wells in the world, an extremely high annual rainfall, and no overall shortage of drinking water. Yet it has genuine problems related to access, utilisation and maintenance facilities.

Kerala also has the highest population density in India, leading to severe sanitation problems.

Kerala Water Authority

In Kerala, the physical infrastructure of the Indo-Dutch Water Supply & Sanitation Project is implemented by the Kerala Water Authority (KWA). This covers construction, operation and maintenance of all rural and urban pipe water supply schemes.

The KWA is also the nodal agency for several large household sanitation programmes.

A Technical Liaison Officer (TLO) is appointed to liaise between the Royal Netherlands Embassy and KWA for all technical and financial aspects and to advise and assist KWA in planning, implementation and monitoring of rural water supply schemes.



Socio Economic Units

With a view to attend to the socio-economic aspects of water and sanitation, three Socio Economic Units (SEUs) were set up in 1987, with offices in the southern, central and northern regions of Kerala. The SEUs are attached to the KWA and are supported by both the Dutch Government and the Danish International Development Agency (DANIDA).



The SEUs function in close collaboration with concerned superintending engineers of KWA. A co-ordinating office in Thiruvananthapuram co-ordinates the work of the three units and also facilitates programme co-ordination with the KWA, the Departments of Health, Social Welfare, Rural Development and Education of the Kerala Government, village

A water treatment plant



Women's participation

Kerala has a tradition of women's participation in community life, including education. Ironically, however, representation of women in decision-making positions in its State Government and administration is not as good, and there is a perceptible lack of women's involvement in rural drinking water and sanitation projects.

Cultural norms and ethos inhibit them in expressing themselves in mixed male-female gatherings. As a result, in many important aspects involving their lives, they have a weak voice in negotiations and decision-making.

In this context, a conscious decision was taken by the SEUs to ensure a higher representation of women among professional and field staff.

In Kerala, women are an active part of community life



panchayats and other local bodies.

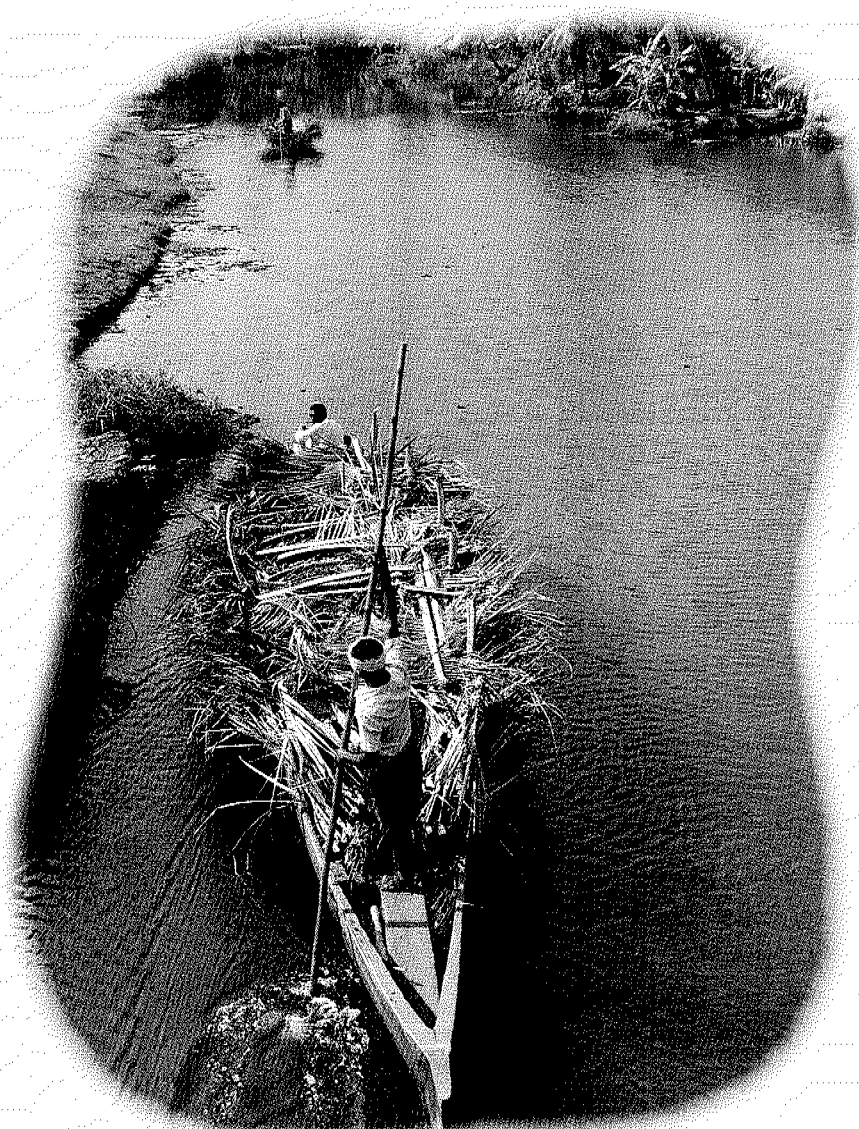
The main thrust of the programme is to make the SEUs a fully integrated part of the Kerala Water Authority, in order to sensitise it to the importance of community (especially women's) participation.

Approach

A central feature of the SEU programme is strengthening community participation and upgrading health, hygiene and sanitation standards through the proper use of water.

A high level of community participation has been achieved in the selection of water source locations, in planning and implementing chlorination and fly control campaigns, and in the development of natural springs.

Interaction with women members of other groups such as leaders of children's centres, local women's clubs, health workers and primary school teachers has also been activated.



Ward Water Committee

The Ward Water Committee (WWC) comprises a *panchayat* representative, a teacher or social worker, two representatives from youth organisations, and one from the ICDS/Health Department. At least two of its members are women.

Standpost attendants

Standpost attendants are women selected and trained by the WWCs and the health sub-committees. Selected from regular users of tap water, they are in the best position to report leakages and breakdowns, and assume responsibility for the proper use, upkeep, cleanliness and maintenance of standposts.

Health promotion

Action-oriented and pragmatic health promotion programmes with the help of local youths — both men and women — are carried out regularly through participatory approaches.

Neighbourhood committees

Local women are encouraged to form neighbourhood committees. It is hoped that, in time, these will achieve the status of WWCs.



School health clubs

School health clubs are formed to inculcate in children the proper use of civic amenities and hygienic sanitary practices. Visual aids, role-playing exercises, quiz programmes, etc. are some of the many ways through which this awareness is being created.



▷ A beneficiary selection drive for sanitation facilities



▷ Standpost attendants at a meeting

A health promotion programme



▷ Through role plays, skits and demonstrative techniques, school children are made aware of health and hygiene

Women masons

With SEU intervention, women from underprivileged groups, (hitherto unskilled construction labourers) were trained as masons and deployed for construction of latrines.

Despite the objections raised by male



masons and the misgivings of other people, together with their own inhibitions, these women demonstrated the remarkable ability to learn the skills fast and to execute work of a high quality.

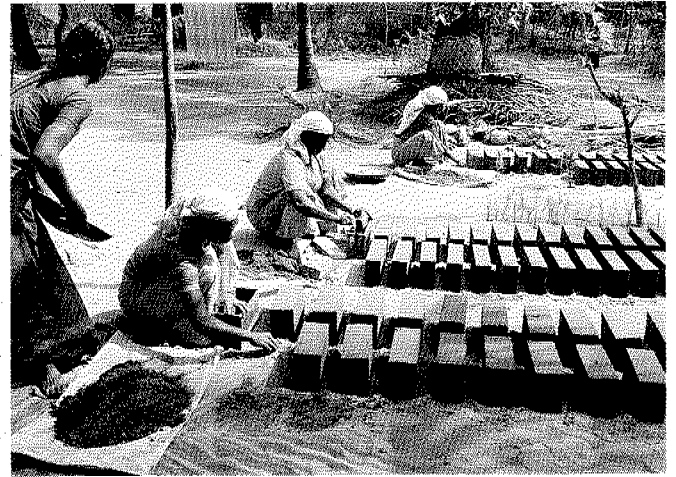
From mere carriers of loads... to skilled workers, women have come a long way— thereby ensuring their economic empowerment and gaining an enhanced self-esteem previously denied them.



Women brickmakers

Another equally innovative, income-generating activity has been the involvement of women in the production of concrete bricks, whereby the construction cost of latrines is considerably reduced.

Women have been trained to make the bricks by using simple tools. They visit the construction site of household latrines where they prepare these



concrete bricks. Women members of the households often give them a helping hand.

The SEUs have, so far, supported women masons by providing work regularly. It is hoped that, in the near future they will be able to secure work on their own.

Development of natural springs

Kerala's hilly regions face an acute shortage of drinking water, especially in summer. There is also a deep-felt need for low-cost methods of providing drinking water.

Because of the scattered and sparse population in these areas, other methods of water supply have not been feasible, except for the development of perennial natural springs.

The development of natural springs helps ease the water problem

Following the success of a pilot project which had sought to develop ten perennial natural springs, the development of more such springs has taken the form of an ongoing programme of the Pazhakulam Social Service Society (PASS) in collaboration with the concerned SEU. As a result, women's burden of fetching water from hilly terrains has been reduced.



POTWATS Programme

Wells in Kerala are, by and large, contaminated. POTWATS, or the Protection of Traditional Water Sources, such as wells, is one of the supportive activities of the SEU involving the restoration of traditional open-well systems. Promoting the use of safe drinking water amongst villagers is the main objective of the programme, and the sustained use of chlorination its main function.

Women promoters undertake house-to-house visits in their programme areas to explain the use of bleaching powder for chlorinating the well water. For a nominal fee, they even chlorinate the well water themselves.

Water committees have been formed in which women representatives take their rightful place.



Well chlorination





She came from the shadows, weighed down by centuries of dogma and domination.

But soon she proved an invaluable part of the Indo-Dutch Water Supply & Sanitation Programme.

With a little support and encouragement, she revealed her prowess in independent decision-making.

And in matters vital to her and her family, she voiced her opinions loud and clear.

Fortified thus with her new-found pride and dignity, she has emerged bold and confident.

Today, she stands at the crossroads of change, a beacon of hope lighting up the way for others to follow.

