

2 INUT 96

*Indo-Dutch Cooperation
in Rural Water Supply and Sanitation
in Uttar Pradesh*



Community-based Management of Handpumps

Sub-Project VIII

Library

IRC International Water
and Sanitation Centre
Tel.: +31 70 30 689 80
Fax: +31 70 35 899 64



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Background

Launched in 1978, the Indo-Dutch Cooperation (IDC) Programme on rural water supply and sanitation seeks to provide safe drinking water, through the installation of deep-bore (India Mark II) handpumps, to all villages in Uttar Pradesh considered 'problem villages' in terms of the Government of India's criteria for scarcity and potability of water and priority lists of villages based on such criteria. Since then, the IDC Programme has been in operation in a number of districts of Uttar Pradesh.

Serious and well-planned efforts to promote hygiene consciousness among village communities, as well as their active participation in the Programme, were begun to be undertaken in 1988. These efforts have given a new dimension and thrust to the IDC Programme, and have emerged as important and integral components.



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Coverage

Initiated in October 1994, Sub-project VIII is the IDC project on rural water supply pertaining to selected 'problem villages' in the districts of Aligarh, Badaun, Moradabad, Kanpur Dehat, Unnao and Ballia.

Under this Sub-project, a total of 3,348 villages in these six districts is proposed to be covered, with the installation of 15,426 deep-bore (India Mark II/III) handpumps.

District	Covered Under IDC			No. of Handpump	
	Tehsil	Block	Village	Installation	Review
Aligarh	Atrauli	3	307	1207	1865
	Koli	3	347	1418	1664
<i>Sub total</i>	2	6	654	2625	3529
Badaun	Gunaur	3	307	997	1061
	Sahaswan	3	374	1231	1297
<i>Sub total</i>	2	6	681	2228	2358
Ballia	Bansdih	5	266	1414	1455
	Ballia	6	145	879	1178
<i>Sub total</i>	2	11	411	2293	2633
Kanpur Dehat	Bhognipur	3	225	507	1428
	Derapur	3	224	929	1193
	Rasulabad	1	93	680	434
	Ghatampur	3	229	1097	1225
<i>Sub total</i>	4	10	771	3213	4280
Moradabad	Bilari	2	262	1432	758
	Moradabad	2	178	1653	557
<i>Sub total</i>	2	4	440	3085	1315
Unnao	Hasanganj	4	284	1221	880
	Safipur	2	107	761	491
<i>Sub total</i>	2	6	391	1982	1371
Total	14	43	3348	15426	15486

IDC : RURAL WATER SUPPLY IN U.P. : SUB-PROJECT VIII

District Moradabad

- Tehsil Bilari*
Block
 1. Bilari
 2. Dingarpur
Tehsil Moradabad
Block
 1. Moradabad
 2. Moondapandey

District Aligarh

- Tehsil Atrauli*
Block
 1. Atrauli
 2. Bijauli
 3. Gangiri
Tehsil Koil
Block
 1. Jawan
 2. Lodha
 3. Dhanipur

District Kanpur (Dehat)

- Tehsil Bhoginipur*
Block
 1. Raipur
 2. Malasa
 3. Amarudha
Tehsil Derapur
Block
 1. Jhijhak
 2. Sandalpur
 3. Derapur
Tehsil Rasulabad
Block
 1. Rrasulabad
Tehsil Ghatampur
Block
 1. Patana
 2. Bhitargaon
 3. Ghatampur

District Badaun

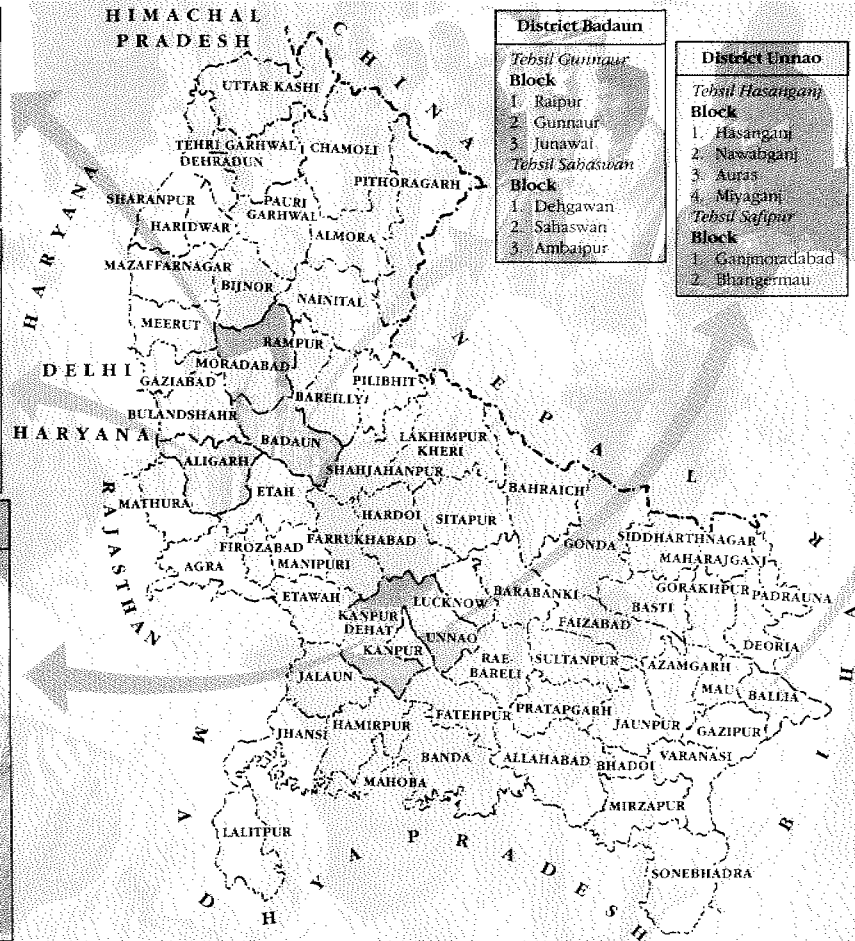
- Tehsil Gunnaur*
Block
 1. Raipur
 2. Gunnaur
 3. Junawal
Tehsil Sahaswan
Block
 1. Dehgawan
 2. Sahaswan
 3. Ambapur

District Unnao

- Tehsil Hasanganj*
Block
 1. Hasanganj
 2. Nasabganj
 3. Auras
 4. Miyaganj
Tehsil Safipur
Block
 1. Ganmoradabad
 2. Bhangermau




District Ballia

- Tehsil Bansdih*
Block
 1. Nawanganj
 2. Pandah
 3. Mamiyar
 4. Beruabari
 5. Bansdih
Tehsil Ballia
Block
 1. Hanumanganj
 2. Garwar
 3. Sohaon
 4. Dubahar
 5. Belhari
 6. Bairia

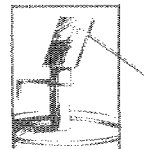
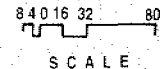
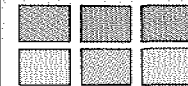


LEGEND

BOUNDARIES

-  INTERNATIONAL BOUNDARY
-  STATE BOUNDARY
-  DISTRICT BOUNDARY

PROJECT AREA



Project Components

This Sub-project, designed to be implemented through the active participation of village communities, particularly women, comprises a physical and a social component.

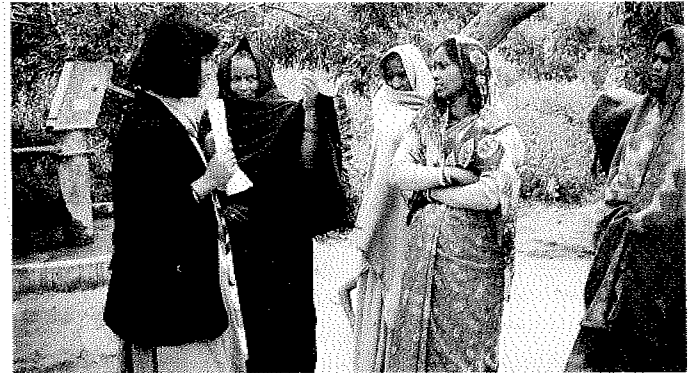
3.1 The Physical Component

Sub-project VIII's physical component relates to :

- the installation of 15,426 deep-bore (India Mark II) handpumps with proper platforms and drains; and
- the review of the 15, 486 existing handpumps in the project villages — in terms of their social acceptability, the conditions of their platforms and the grouting, as well as of the drainage, and the adequacy of water discharge from the standpoints of quality and quantity; on the basis of these reviews, corrective interventions necessary are to be taken up by the UP Jal Nigam.

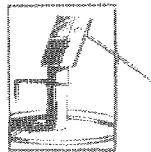
3.2 The Social Component

An important feature of the Sub-project is the emphasis it places on the involvement of village communities in the planning and implementation of activities for village drinking water facilities, as well as in their maintenance. Their involvement is to be ensured through:





- the selection of socially acceptable, and technically feasible, handpump sites by village communities, particularly women — in consultation with *gram panchayat* members;
- the promotion of hygiene consciousness and community awareness, with a view to ensure the optimum use and maintenance of water supply facilities;
- the sharing, by the members of village communities, of the costs of upgradation and maintenance of such facilities;
- the setting up of *jal samittis*, at the handpump level, and of relevant coordinating committees at the ward/ village level, and the extension of necessary support to them to ensure the proper upkeep and maintenance of such facilities;
- the creation of a self-sustaining resource base of trained caretakers and handpump mechanics to support the project activities; and
- the intensive mobilisation of people, in selected villages of each block, to facilitate broadbased environmental sanitation and the integration of relevant Government programmes relating to literacy, social forestry, sanitation, the ICDS, etc.



The Agencies Involved

The responsibilities relating to the project are to be shared by various agencies whose roles in it have been clearly defined. These include :

4.1 The Department of Urban Development

The Department of Urban Development is to function as the nodal agency for the effective implementation of the project.

4.2 The UP Jal Nigam

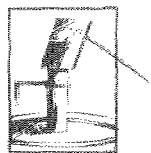
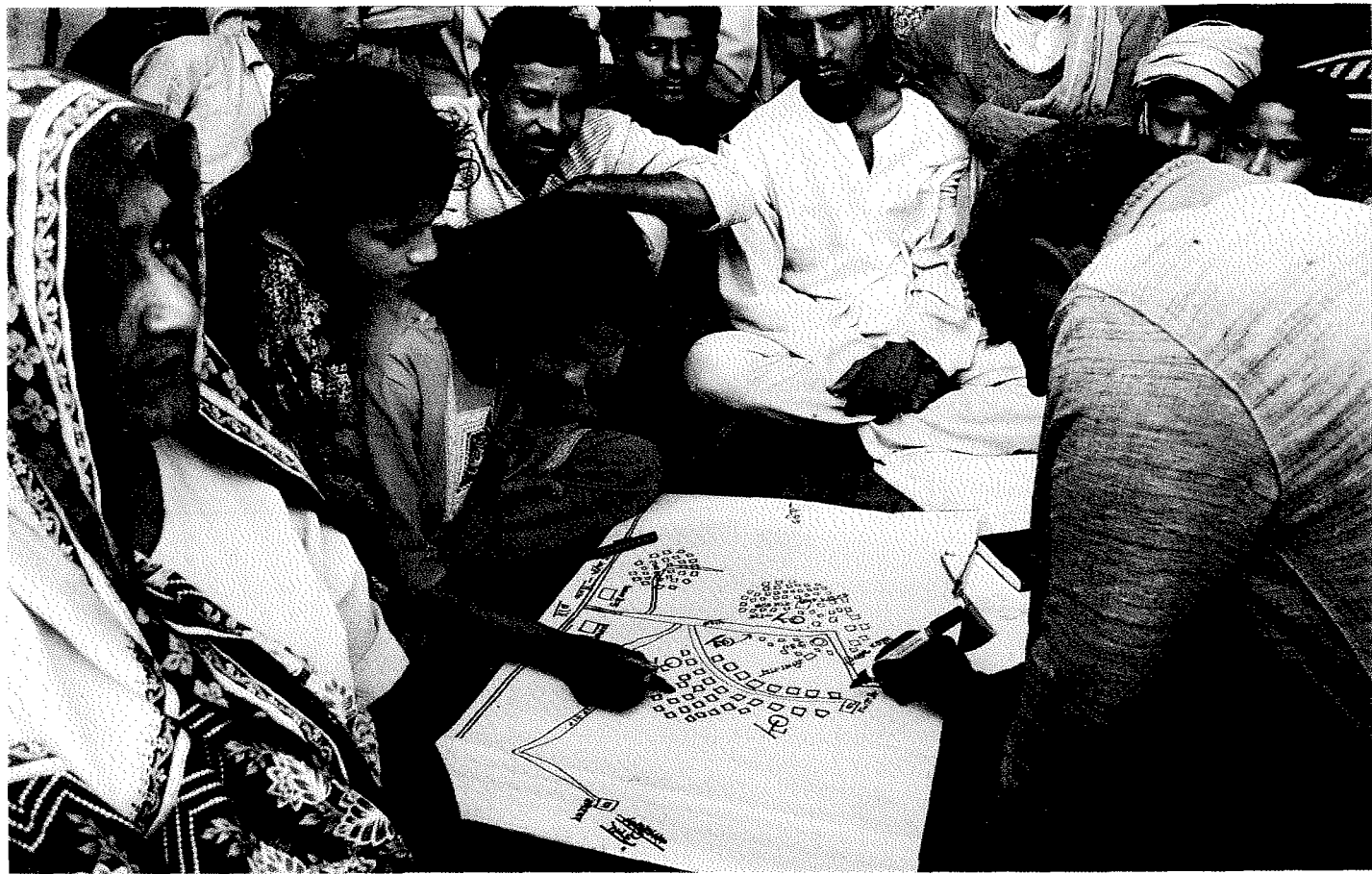
The UP Jal Nigam, a State Government undertaking, is to serve as the technical implementing agency, responsible for the project's 'physical component' — the installation of new handpumps, and corrective interventions with regard to the existing ones, in the villages selected.

4.3 The PSU Foundation

The PSU Foundation is a development agency initially set up under the IDC Programme to integrate the 'social component' into it, through the promotion of community participation, hygiene awareness, and institution-building efforts at the village level. It will continue to play this role in the implementation of Sub-project VIII.

The Foundation was registered as an autonomous agency in November, 1993 under the Societies Registration Act, 1860, with a mandate to support and promote rural development, especially in the water supply and sanitation sector.



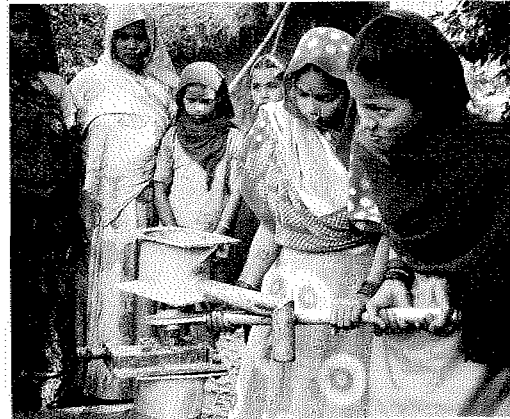


Critical Features of the Programme

The Programme is unique with regard to its approach and strategy. Some of its features, which are crucially important for its success, relate to :

5.1 Site Selection

- The villages for the implementation of the project have been selected on the basis of criteria laid down by the Government of India (GoI) and the Government of Uttar Pradesh (GoUP).
- For each village identified for the Sub-project, a notional map has to be prepared by its inhabitants with the active help of the PSU Foundation and the UP Jal Nigam. The map has to show the village's existing water points — wells, deep-bore India Mark II/III handpumps, ponds, etc., its major land features, the spatial distribution of its various social groups, and the location of schools, *panchayat gbars* and other places where people congregate.
- The number of handpumps for each project village has to be determined on the basis of the following criteria:
 - * one handpump per 250 persons of the design population; however, the maximum walking distance to any handpump should not exceed 150 metres;



- * the provision of handpumps for socially weaker sections, based on the size of such groups, as well as on a stipulated minimum walking distance;
 - * the provision of a handpump for each isolated habitation/hamlet with a minimum of 10 households, or a population of at least 50 persons; and
 - * the provision of handpumps at institutions like schools, public health centres (PHCs), *anganwari* centres and the local marketplace.
- Under this Sub-project, sites for handpumps should be either on land owned by *gram panchayats*, or on privately owned land with the landowner giving an undertaking to surrender his land rights to the concerned *gram panchayat*.
 - Handpump sites should also permit the proper disposal of waste water, so that do not become breeding places for mosquitoes which act as carriers for malaria, filaria and brain fever.

5.2 Installation of Handpumps

After a handpump site has been selected, work relating to the actual installation of an India Mark II/III handpump will have to be taken up. Water drawn by these handpumps is expected to be free from contamination as it is to be drawn from deep water-bearing strata.

- A deep borewell of 150 mm/200 mm-diameter has to be dug for tapping the ground water source; the depth of the bore would depend on the location of the water-bearing strata, but in no case is it to be less than 25 metres.
- A handpump is to be installed with a platform around it, as also a footstand and a proper disposal drain; a soak-pit is also to be provided if a suitable disposal point is not found.

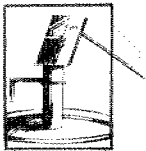
5.3 Testing of Water Samples

Before a handpump is commissioned for public use, the water obtained from its borewell is always to be tested for its chemical and bacteriological quality.

5.4 Hygiene Promotion Activities

The actual provision of water is always to be supported by health education and hygiene promotion activities aimed at the reduction of unhealthy and unhygienic practices of men, women and children at the community, household and school levels. These include:

- the promotion of community awareness about the adverse effects of unsafe water and sanitation on health;
- the promotion of improved, more hygienic sanitation practices in schools;



- the protection of wells —the traditional source of drinking water in villages;
- the safe and hygienic disposal of domestic and human waste;
- steps to improve personal hygiene; and
- the prevention and cure of diarrhoeal and other water-related diseases.

5.5 The Role of Women

Sub-project VIII aims at meeting the requirements of water of village communities as a whole, with special attention given to the daily, routine needs of women — the main 'handlers' of water for drinking and other household purposes. Their participation and involvement are to be sought :

- at the time of selection of sites for handpumps;
- as *jal samiti* members and caretakers for the upkeep and preventive maintenance of village handpumps;
- as mechanics for the repair of handpumps and corrective measures in the event of breakdowns; and, most importantly,
- as caretakers of the health of their family members.

5.6 Community-based Operation and Maintenance

Under this project, responsibilities for the operation and maintenance of handpumps are to rest with the village communities. At each village selected, a system has to be evolved for taking decisions on matters relating to the operation and maintenance of handpumps; the decisions are to be taken by representatives of user households and *panchayats* in their capacity as members of water committees at the village, ward, or even at the handpump level. The project provides for the training of maintenance mechanics for village communities, while generating funds for handpump maintenance, and also identifies caretakers and mechanics for such training.

5.7 Jal Samitis

Jal samitis are to be formed by representatives of village households—primarily women—using handpumps. The main function of a *jal samiti* should be to collectively take decisions regarding site selection, the maintenance of handpumps and their surroundings, and the overall sanitation of the village. These *samitis* are also to undertake several other activities—the promotion of hygiene at the community and household levels, the pooling of resources in terms of money, material and

labour, and coordination with *gram panchayats* and the UP Jal Nigam.

Attempts will be made to give *jal samitis* a legal status by linking them to *panchayats* under Section 112(1) A of the Panchayat Raj Act. *Gram panchayat adbhikaris* (GPAs) extend support to these *samitis* in executing their functions. They can also help *jal samitis* formulate by-laws for the operation and maintenance of handpumps. Apart from their responsibilities relating to maintenance, GPAs also have the authority and power to generate/collect revenue/user charges from the members of village communities.

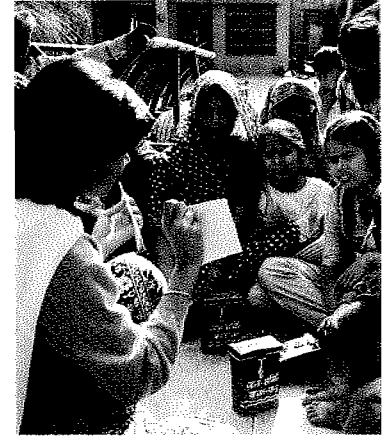
The *jal samitis* should have a three or two-tier structure, at the ward, village or handpump level.

5.8 Institutional framework

With a view to facilitate community action in the planning and management of drinking water under this project, it is important to evolve a supportive institutional framework with the involvement of officials of the district and block administration, as well as those of *gram panchayats*.

- District Coordination Committees (DCCs)

District Coordination Committees (DCCs), chaired by District Magistrates, are to take policy decisions and play a



coordinating role in ensuring the effective integration of activities.

Apart from the DM/CDO, the primary members of each such Committee are to be the DDO, the DPRO, CMO, BSA, the district coordinators of the ICDS, DWCRA, NYK etc., the District Forest Officer and the Executive Engineer of the UP Jal Nigam. The Secretary of each DCC is to be a social scientist of the PSU Foundation.

- Block Coordination Committees (BCCs)

The basic function of a Block Coordination Committee (BCC) should be to ensure the effective implementation of the project in the concerned block. Operating under the chairmanship of the BDO, each such Committee is to consist of the ADO (Panchayat) of the IDC villages, functionaries of the ICDS and the DWCRA and the In-charge, PHC/CHC.

Each BCC is to be responsible for formulating field-level implementation strategy and effecting the integration of all activities under the IDC water supply and sanitation programme within the ambit of the overall development of villages in the block.

5.9 The IDC Pradhans' Forum

An IDC Pradhans' Forum is to be set up at the block level to serve as a platform for *pradhans* of IDC villages to meet, exchange notes and share experiences on water and sanitation-related issues in their villages. This would help facilitate collective decision making as well as the development of a coordinated strategy for each block.

