

**Promising water resources approaches in the  
Drinking water supply and sanitation sector**

# **An assessment in Maharashtra State - India**

(draft not completed)

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## List of Abbreviations

BDO	Block Development Officer
BLT	Block Level Team
CD	Community Development
DFID	Department for International Development (formerly ODA)
ESR	Elevated Service Reservoir
GOI	Government of India
GOM	Government of Maharashtra
GP	Gram Panchayat
ICDS	Integrated Child Development Services
ID	Internal Distribution
LSO	Local Support Office, DFID
MO	Medical Officer
MRWSSP	Maharashtra, Rural Water Supply & Sanitation Project
MWSSB	Maharashtra Water Supply & Sanitation Board
NGO	Non-governmental Organisation
NRTC	Nashik Research & Training Centre
OOPP	Objective Oriented Project Planning
PPMU	Project Planning & Management Unit
PRA	Participatory Rural Appraisal
TISS	Tata Institute of Social Sciences
TOT	Training of Trainers
TWG	Training Working Group
VLT	Village Level Team
VWC	Village Water Committee
VWP	Village Water Person
WSO	Water & Sanitation Office
ZP	Zilla Parishad

## Overall Assessment Methods

1. Methodology of assessment for feedback from the field,
  - Focus Group Discussions with women in selected project villages
  - Meeting with VWC members (men and women) in selected project villages
  - Interviews with Sarpanch in selected villages
  - Discussion with women returning from fields
  - Interviews with officials from list of stakeholders identified, namely:-
    - Zilla Parishad
    - MWSSB (now MJP)<sup>1</sup>
    - Irrigation Department
    - Ground Water Survey Development Agency
    - Soil Conservation Department
    - Maharashtra Pollution Control Board
    - Railways
    - Forest Department
    - Collector (Revenue Department)
2. Reports and notes prepared by Field officers, strategy reports, correspondence have been referred to in the course of this assessment.
3. Workshop was held for key govt. functionaries in february,1997 to evolve an integrated approach for water resources management.
4. Discussions with officials, consultants and project partners over the last few months have helped shaped this report.
5. The assessment for Principle 6, draws heavily on recent events and consultancies held such as the State Level Gender Sensitisation Workshop, the Gender Strategy Consultancy commissioned by DFID and the DFID Gender Strategy Framework in addition to discussions with stakeholders at all levels..
6. Several case studies from the field illustrate various points concisely summarised in this report. They have been developed by DFID and TISS staff.
7. Finally, this assessment report draws substantially from the experiance of the author during the last ten years in the rural setting.

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<sup>1</sup> The name has recently been changed to Maharashtra Jeevan Pradhikaran

## **PROMISING WATER RESOURCES APPROACHES IN THE DRINKING WATER SUPPLY AND SANITATION SECTOR.**

### **Chapter 3.**

#### **Principle 1: Water Source and Catchment Conservation and Protection are essential.**

#### **Background:**

Under the DFID assisted Rural Water Supply and Environmental Sanitation Project, three Regional Rural Water Supply Schemes are being executed. Two schemes are in Jalgaon and one in Nashik District of Maharashtra. Source of the scheme in Nashik District which benefits 56 villages is Girna Dam. Whereas source of the 80 Village Scheme in Jalgaon District is Hatnur dam and 51 Village Scheme is the river Tapi.

The 56 and 80 Village Schemes have adequate water at the source. However the source for the 51 Village Scheme was found to be insufficient. Generally the post monsoon flow in Tapi river lasts till March-April. Thereafter till the flow restarts, which is by the end of June, the river gets dry. The work on the 51 village scheme was suspended till another source was found to augment the requirement of water during the three months of summer. A reservoir called the Kalali Lake was found to contain adequate water but it also fed two lift irrigation schemes. The Irrigation Department which issues licences to the lift irrigation schemes clarified that the schemes do not have permission to lift water beyond february. Following an assurance from the district authorities that in case of illegal lifting of water, preventive measures would be taken , Kalali, as an augmentation source was finally selected.

It may be noted that the Tata Institute of Social Sciences which carries out Community Participation activities in the project area, first brought to the notice of the authorities the reaction of the villagers regarding insufficiency of water at the original source.

It is thus seen that in all the three schemes, sources being essentially irrigation dams, requirement from it for drinking purposes form a small fraction. Besides, these sources are not adversely affected by city or industrial effluent as no big cities or industrial townships are located nearby. Most of the intensive cultivation is carried out downstream of the dam and as such does not release excess fertilizer residue in the catchment area.

At the National/State/Local levels, however there is growing consciousness about this aspect.

Ganga which is the major river feeding the northern part of India, was severely polluted due to the effluent discharge from the cities. The

Government of India for the first time launched the Ganga Action Plan to restrict pollution. This concept was extended to two rivers in Maharashtra. Cities located on the banks of river Godavari and Krishna are taken up in the River Action Plan.

Pollution Control regulations have been made stricter. Sangli which is a city located on the banks of river Krishna suffered from major outbreaks of hepatitis due to the jack-well being located near the opening of the city drain. One of the co-operative sugar factory used to release large quantities of spent wash into the drain which further polluted the river. The Pollution Control Board caused the distillery to be shut down. The jack-well itself was shifted away from the city drain.

- A separate Soil Conservation Department was created in the state in 1992. One of the major contributions of this dept. was in taking up water conservation works in the tankerfed villages. The expenditure on the soil conservation over the last ten years is as follows.
- A legislation to control over exploitation of ground water was passed in 1993. The Groundwater Survey and Development Agency has identified dark watersheds where further digging of wells/bore-wells is prohibited under this legislation.
- A provision has also been made where a private well cannot be constructed within a radius of 1500 Mtrs. from the existing public source.
- At the local level also the people organised themselves against indiscriminate felling of trees. The Chipko and Appiko movements in the Northern and Southern part of the country strongly focussed on the aspects of soil conservation and environmental degradation.

#### **Indicators of depletion/contamination of water source.**

- (1) Deployment of tankers over the last ten years in the State;

<u>Year</u>	<u>No. of tankerfed villages</u>
1987	4339
1988	3166
1989	1917
1990	2830
1991	2303
1992	7297
1993	7385
1994	3871
1995	7327
1996	4867

The figures clearly demonstrate that inspite of a growing investment in the water sector, the scarcity situation has not eased. If at all, last five years indicate a disturbing trend.

- (2) Cattle population over the last ten years;

Cattle census is conducted by the state govt. once in five years. The 1992 census figure puts the cattle population at 36.39 million compared to 34.26 million in 1987. Even though the increase is not alarming, it may have to be understood that majority of this population is not stalled.

- (3) Deaths occurring due to water borne diseases.

### **Threats to Water and Catchment Area Protection.**

- (1) Excessive use of groundwater sources for irrigation;
- (2) Overgrazing;
- (3) Availability of cheap power for drinking water;
- (4) Lack of control over digging of wells in private lands;
- (5) excessive use of fertilisers particularly for cash crops such as sugarcane.
- (6) Reclaiming of natural drains;
- (7) Growing industrialisation (e.g Paper Mills etc.);
- (8) Rapidly growing population.

### **Limitation :**

Even though the Government, environment activities and people have started taking active part in the conservation of water sources, following limitations still persist.

1. **Cultural Practices:** Practices such as throwing the ashes of the in the river would take a long time to be changed. Certain religious festivals involves immersion of idol of deities in the river or sea water e.g. Ganesh festival in Maharashtra, Durg Puja in West Bangal.
2. **Private Ownership of Sub-soil Water:** This leads to a race in exploitation of water sources.
3. **Traditional Practices :** Washing of domestic animals, bathing or even defecating along the water source is a common phenomenon particularly in the rural areas.
4. **State's Role in Providing Water :** By implication, the Government had always assumed the responsibility of providing water. The people therefore have no long term stake in conserving water.

5. **Insufficient Tools to Identify the Polluters:** This is particularly true in relation to the farmers using excessive fertilizers for their crops.
6. **The Beneficiary and the loser not being the same:** This is particularly true in case of irrigated areas where drains have been reclaimed for cultivation. Quite often the cultivator nearest to the final outlet sees himself as a loser since he has to part with his land to make way for the water to flow which inturn benefits the cultivators in the catchment area.

**Principle 2:**

Water is essentially a State subject. However, when a dispute arises with regard to the sharing of waters between two States, inter-state councils are statutorily provided for, to resolve possible conflicts.

Following is the stake holders classification on the basis of their actual role.

Level	Stake-holder	User/Decision Maker/Implementer/Regulator/Consequence Manager/Opinion leader.
State (Regional)	Irrigation Department	UDIR
	Power Department	UC
	Agriculture Department	UDC
		UC
	Pollution Control Department	C
	Health Department	C
	Water Conservation Department	I
	Water Supply Department	UIC
	Animal Husbandry Department	UC
	Department of Natural Calamities	RC
	Co-operation Department	UC
Environmentalists	O	
Local level.	Farmers	U
	Co-operatives	U
	Villagers/Municipal Body	UC
	Cattle Owners	U
	Commercial establishments	U
	Political leaders	OC

At the state level, till recently, no forum existed to agree upon the allocation of water. Water Resources Authority came to be set up in 1996 under the Chairmanship



of the Chief Minister, one of the items on the agenda was to establish priorities for water use. Secretaries of all the users departments are made members of this authority.

Total estimated availability of water in Maharashtra is 123 million TCM. Maharashtra can utilise only 74 million TCM DUE TO interstate agreements. Out of this 56 million TCM is used for irrigation . Remaining 18 million TCM is used for drinking water, industries, fisheries etc.

Water resources are available from the following sources :

Dams (Major, Medium and Minor).	Built and controlled by the Irrigation Dept.(in some case Private Power Companies and Municipal Authorities own the dams which are exclusively built for their use). Used for irrigation, power,industry, fishing,cattle etc.
Rivers	There are notified and non-notified rivers. Water in notified rivers is regulated by the Irrigation Dept. The Revenue Dept. controls the utilisation of water from the non-notified rivers . Used for irrigation, drinking water and cattle.
Sub-soil water.	Exploitation of this source is controlled by the owner of the land . Used for irrigation, drinking water and cattle.
Percolation Tanks.	Built and controlled by the Zilla Parishad - Irrigation and Drinking Water.
Village Tanks.	Controlled by the Village Panchayats - used mostly for bathing, washing clothes and cattle etc.

#### **Level of Satisfaction with allocated Volume :**

Industries, Agriculture and Co-operation Departments were most unhappy with allocated quantities. Water Supply Department was fairly satisfied since the State gives overriding importance to the availability of drinking water. Department of Animal Husbandry did not consider it to be an important issue since the cattle owners mostly depend on local sources for their requirements.

#### **Process of Decision making :**

The Irrigation Department on its own or based on popular demand, carried out a survey of the river basins to identify the potential sites for construction of Dams and smaller tanks. While carrying out this survey the intention is to harvest maximum quantity of water.The irrigation dept. on its own does not invite the stakeholders such as municipal bodies etc.The user deptts. also on very rare occasions stake a prior claim. Most of the demands are made only after the dam is complete.

*During an interview with the chief engineer of the irrigation dept., he pointed out that dams are considered feasible if the area benefitted is four times the area submerged. In the command area lands are acquired in excess of a standard area , which is in turn distributed to those who lost their lands under submergence. In case water is diverted for other uses , irrigation coverage gets reduced and those who parted with their lands get severely affected. To take a decision on diversion of from irrigation to some other use, there exist a Secretary's committee. This committee also finds it difficult to take a final decision in the face of severe opposition.*

Water allocation depends on the purpose behind creating the water source. Moreover growing population of towns, upcoming industrial areas, and drought situation leads to alteration of allocations. Normally the political leadership has the loudest voice in effecting such changes.

At the local level however, there is no mechanism for allocation of water. It is normally a system of spoils. The Irrigation Department issues permissions to the Lift Irrigation Schemes to take water during a certain period. However, in practice there are instances where they lift water far in excess of their allocation and beyond the stipulated period. Irrigation Department also gives permission for lifting water for drinking purposes. Thus various users place their demands with the Irrigation Department which makes final decision on allocation. Here there is no forum for agreeing on water allocation. During the year of scarcity, however, the District Magistrate has been empowered to reserve water for drinking purposes. Under the ODA Project, necessary permissions were obtained from the Irrigation Department for lifting water from the Dams.

At the village level however, there are a number of users such as farmers, cattle-owners, commercial establishments, domestic users etc. There is, however, very little equity in water usage. Groundwater sources are exploited with total disregard for the requirement of water for drinking purposes. There are villages which do not have adequate water for drinking but in the same village water intensive crops such as sugarcane may be found. During scarcity of water, the District officials have the authority to requisition such irrigation sources. Compensation is however paid to the owner of the source, which is considered to be meagre as against the loss which he is likely to suffer.

It is also a common sight to see a new well being dug close to a public water source. This leads to rapid depletion of such sources.

The Water Supply Scheme itself caters to a number of users. Water tariff is levied on the basis of the diameter of private connection. Since no water meters are provided, bigger households or those having cattle consume large quantities of water. Most of the stand-post users do not pay water tax. The system however provides for equal access to water. Anybody who is prepared to pay the water tax can get a connection of desired diameter. Under the ODA Project, one stand-post has been provided for 250 souls and the communities have been asked to decide on the location through the village water committees.

**Case Study - Alandi Town :**

*Alandi is a town situated on the banks of river Indrayani near Pune District and has a population for more than 10,000 souls. This is one of the important religious centres in Western India. Almost 1,00,000 devotees visit this town every day.*

*The source of water is the river Indrayani which dries up after November. A small weir has been constructed to store water to meet the requirement of this town after February. However, a large number of lift irrigation schemes operate during this season and the weir dries up by February. The President of the Alandi Municipal Council informed me that the Lift Irrigation schemes do not have permission to lift water from the weir. A number of times, pumps etc. have been confiscated but the problem still persists.*

**Result :**

1. Till recently there existed no forum to agree on water allocation. With the formation of Water Resources Authority, an effort is being made to get the stake-holders to agree on the allocation.
2. The State of Maharashtra has decided on the priorities for the use of water in which drinking water has been accorded highest priority.
3. Irrigation Department being the major custodian of water resources is also the major decision maker in water allocation. Other stake-holders have very little say.
4. There is exist no legal framework or traditional practices for water allocations.
5. In the use of groundwater there is very little equity. However, in the Drinking Water Supply Schemes there does exist an equal opportunity for accessing water.

**Key Recommendations :**

1. All users must share the capital and O & M cost to the extent of its allocation.
2. Power used for lifting water needs to be metered. The rate structure could be such that marginal/small farmers could be charged a low unit rate for their initial use and the rate could increase geometrically as the consumption increases.
3. Water meters need to be installed particularly for those who are major consumers.

4. Information on water availability and water allocation and consumption needs to be open to public scrutiny.
5. There needs to be a legal mechanism for conflict resolution.

**Principle-3:**

**Efficient water use is essential and often an important water source.**

A leak detection survey was carried out by M/s. Tata Engineering Consultancy Services in three districts. Their major findings were as under :

<u>District</u>	<u>Leak Flows(lit/conn/hr)</u>
Buldhana	363
Sangli	210-380
Thane	100-157

The quantity of water flowing as is high by any standards. Some of the defects pointed out in the system are as under;

- Improper jointing of PVC pipes and lack of application of solvent cement.
- Inadequate replacement of worn-out washers or glands.
- Service connection from the mains are given without using ferrule
- No taps at the service connections.
- No taps provided on the service connections
- The mains alongwith village road are laid at shallow depths.

Though a questionnaire a numbers of players in the drinking water supply schemes were interviewed which included women, village heads, village water supply operator and members of the village water committee. Surprisingly a large proportion of them did not identify inefficiencies in water usage as a major problem. This was particularly interesting since a large number of villages prior to commencement of the ODA scheme did not have taps on the stand-posts. Further analysis indicated following reasons for this :

1. Since the village gets water two times a day at fixed hours most of the people kept their vessels ready for filling. Thus there was no wastage.
2. Water Consumption is not metered. As a result of which the gap between water availability at the source and at the taps is not known.
3. Most of the houses in the rural areas are small. Leakages in their private taps could flood their households. Thus the incidence of leakages in private connections is very meagre.

4. Use of drinking water for cattle was considered to be a legitimate activity. Thus, even though large cattle population fed on drinking water sources, it was not considered to be wasteful.

There was however an agreement regarding wastage of water in irrigation of cash crops. Since electricity is charged on horsepower basis, its use for lifting water is made liberally. Over irrigation has made large tracts of lands saline and thus infertile. Large scale efforts are being taken by the Agriculture Department to optimise water use through drip and sprinkler irrigation systems.

#### **Water Saving Measures :**

1. To prevent wastage of water due to the tap remaining open, a new push up type tap is installed in most of the ODA assisted villages.
2. Village water persons are being trained in giving water connections.
3. Float valves are being fitted at the storage reservoirs to prevent overflow.
4. Women are being educated in not throwing away earlier days water.
5. Village Water Committees are earmarking other water sources for cattle and saving the water supply scheme only for providing drinking water.
6. People are being educated in taking up kitchen gardening.
7. Under the Rural Sanitation Programme ,users are being encouraged to use pans with 45degrees slope in latrine construction.
8. Children are being educated in desisting from damaging taps.
9. Cultivators are being educated in the use of sprinkler and drip irrigation systems.

#### **Measures considered but not implemented :**

1. Disconnection of private taps for non payment of water cess:- Quite often in small villages the Village Panchayat members are reluctant to take unpleasant decisions.
2. Use of individual water meter: The main reason for its non-implementation is that the cost of the water meter is quite high. Secondly good quality water meters are not available The available water meters become dysfunctional quite soon. Also, the meter readings are not considered to be reliable. Lastly repairing of water meters in remote areas is rather difficult.

## **Results :**

1. Presently inefficiencies in water use is not considered to be a major problem.
2. In the Project though, efforts have been made to sensitise the users about the need for efficient use of water and measures to attain it.
3. The concept of reuse of waste water is still not prevalent in the rural areas on a large scale. However, in urban areas, city sewage is not allowed to be mixed in the river (if the river happens to be the source of water) and the waste water is lifted after treatment for irrigation (Sangli, Alandi case studies).

## **Principle 4:**

### **Management Needs to be taken care of at the lowest appropriate level**

There are broadly three categories of Water Supply Systems in Maharashtra;

- For Irrigation;
- For Domestic Use;
- For Industrial Use.

## **Irrigation System :**

Irrigation is provided through Dams, Lift Irrigation Schemes, Tube-wells or Dug-wells. The major, medium and minor irrigation dams are exclusively designed, constructed, maintained and managed by the Irrigation Department. The Department of Irrigation regularly maintained all information pertaining to water levels, storage etc. They also decide on this extent of water to be allocated for agriculture, industry and domestic use. Even though there are no committees managing this irrigation systems, the local legislatures wield considerable influence over the usage pattern.

Lift Irrigation systems are either managed by the Government or through Co-operative Bodies. There exist a large number of Co-operative Lift Irrigation Societies drawing water from the sources which feed the project villages. Most of the Lift Irrigation Schemes are managed by Co-operative Institutions. Some of which have been managing them for more than 25 years. Recently, Government of Maharashtra began execution of a massive Lift Irrigation Scheme in Sangli and Satara Districts. In some pockets of Maharashtra, independent Corporations have been set up to provide impetus to the development of water resources on commercial lines.

Tube-wells and dug-wells are managed by individual cultivators. In some cases, lift irrigation systems have been set up to irrigate a small area by forming co-operative societies.

### **Domestic Water Supply Systems:**

The Water Supply Systems are executed by two implementing agencies viz., Maharashtra Jeevan Pradhikaran and the Zilla Parishad. After its completion, the regional schemes (covering more than one Gram Panchayat) are handed over for operations and maintenance to the Zilla Parishad. Smaller schemes (catering to only one Village Panchayat) are handed over to the Village Panchayat.

*Maharashtra has been amongst the pioneering States to evolve a system of democratic decentralisation. In a three tier system following democratic institutions have been created.*

- *Zilla Parishad at the District level (consisting of 700-1000 villages);*
- *Panchayat Samiti at the Block/Taluka level catering to an average of 50-100 villages.*
  
- *Gram Panchayat at the Village level catering to only one village or a group of 3-4 villages.*

*Regular elections are held by the Government to enable people to choose their representatives.*

Some of the Village Panchayats have been successfully managing the water supply schemes for over two decades.

### **Industrial Water Supply Systems :**

These system have been managed either by the individual industries or by the State owned Industrial Development Corporation.

### **Management of Water Resources :**

#### **Operational Management-**

Water Sources could be classified into five categories depending on its management responsibilities.

1. Dams, notified rivers etc.,
2. Percolation Tanks,
3. Non-notified rivers, rivulets,
4. Village Ponds/Lakes,
5. Groundwater sources like tube-wells, dug-wells etc.,

The first category is managed exclusively by the Irrigation Department, Second category is managed by the Zilla Parishad, third by the Block level official called the Tahsildar, fourth by the Village Panchayat and fifth by individuals.

### **Strategic Management :**

The legal and policy framework within which the water resources are utilised is evolved by the State. Where schemes such as Co-operative Lift Irrigation Schemes, Private wells exist, it is difficult for the State machinery to effectively counter any breach of the legal provisions.

### **Decentralisation of Management :**

In the Drinking Water Supply Sector, management currently takes place at the lowest appropriate level. At the lowest level, democratically elected institution is the Village Panchayat. This institution looks after individual scheme. Where two or more Village Panchayats are involved, to adjudicate on the conflicting issues, a higher authority manages the scheme.

It would have been more appropriate for the Panchayat Samiti to manage a regional scheme within its jurisdiction. However, the act governing the Panchayat Samitis do not provide for management of water supply schemes as a part of its functional mandate. Moreover, it does not even have the powers to levy water tax. The Panchayat Samitis are also financially weak institutions.

In some Districts regional schemes are managed by societies. Most of them are highly dependent on the Zilla Parishads for funding the deficit and do not have very clear job definition.

Even though the Village Panchayats are able to manage their WS scheme with a fair degree of proficiency, they find themselves highly dependent on the Zilla Parishads for meeting any expenditure which is beyond their capacity.

The Zilla Parishads themselves are financially somewhat inadequate. They have a fund called the District Maintenance and Repairs Fund which provide cushion to the Village Panchayats. Some of the Zilla Parishads insists on a partial contribution from the Village Panchayats (25%), if part of its M&R Fund is to be made available to them.

In the Project villages, a survey carried by JPS Associates, Management Consultants, indicated that by a large the users/stakeholds were reasonably satisfied with the individual schemes managed by the Village Panchayats. This was mainly because individual schemes are not complex. As against this, most of the users/stakeholders were unhappy with the management of the Zilla Parishads. There are a number of reasons for this.

1. The Regional Schemes being more complex, the Zilla Parishad staff which is inadequately trained, cant manage it effectively.
2. Inadequacy of skilled staff to manage the scheme.
3. Non-willingness of the Village Panchayats to share part of their water tax collections with the Zilla Parishads.



4. Lack of focus on the O&M of the water supply schemes in general.

Under the DFID Project, part of the 80 Village Scheme in Jalgaon District is completed and handed over to the Zilla Parishad. By providing a separate Water Management Unit, adequate skilled staff and training, maintenance of the scheme was found to be highly satisfactory.

#### **Constraint in Delegating Management of the Scheme to Lower Levels :**

1. The main constraint in the Drinking Water Sector is that the schemes are not economically viable , atleast in the initial years when the water tax collections are expected to be low. This leads to inadequate maintenance at the cost of the sustainability of the scheme.
2. Quite often, due to personal relation of the Village Panchayat members and the customers , it becomes difficult to take extreme steps such as disconnection of supply etc

#### **Principle 5 :**

##### **Involvement of all Stakeholders is required**

(I) There was considerable debate about the definition of stakeholders. The view was that anybody who has anything to contribute to the success of the Project should be treated as stakeholders. Another view was that a stakeholder should be the one who has something to lose in case the water supply scheme fails. The second definition was finally accepted.

While discussing Principle 1, possible stakeholders were identified with regard to management of water resources in general. In this Chapter, the reference is specifically to the Water Supply schemes taken up under the Project. Following stakeholders were identified;

- Village Water Committee;
- Zilla Parishad;
- Maharashtra Jeevan Pradhikaran (Engineering Department of GOM);
- Local Political Leadership;
- Women ;
- Cattle Owners;
- Village heads;
- Water Management Units;
- Irrigation Department;
- Pollution Control Department,
- Gram Panchayats;
- Cultivators.

Through personal interviews, responses were elicited from the various respondents. Major findings are as under :

- (1) The Village Water Committees felt that they were very much involved in decision making activities for the first time. Similar was the response from women who said that having independent meetings with them enabled them to understand the project and also feel involved.
  - (2) Zilla Parishads felt that -
    - They were more involved now. Earlier the role started only after handingover.
    - Steering Committee meetings at the District Level made it easy for them to co-ordinate and appreciate the ultimate goal of the project.
    - Gardian Minister being from the Project area, Z.P. was more active.
    - Feel more confident in taking over the schemes.
  - (3) Most of the political leaders felt that they were not adequately involved.  
They felt that regular meetings with them would have enhanced the pace of execution.
  - (4) Maharashtra Jeevan Pradhikaran felt that they were more involved in the Project than what was traditionally expected of them. For the first time they felt that social skills are as important as technical skills.
  - (5) Cattle owners felt that they were not asked about their opinions. Even those who were members of the Village Water Supply Committee did not feel that adequate attention was paid to the needs of cattle.
  - (6) Sarpanch who was the head of the Village Panchayat knew about the Project in sufficient details and also felt involved. However, some members of the Village Panchayats felt that even though they have to ultimately run the scheme,they did not have a significant role to play during execution. This may lead to conflict between VWSC and Village Panchayat.
  - (7) Irrigation Department saw its role only to the extent of issuing permission to lift water.
  - (8) Pollution Control Board's interaction was to the extent of participation in a couple of Steering Committee meetings. They did not feel adequately involved.
- (II)
- (I) VWSCs though felt that they were involved, sought a larger role for themselves in term of locations of storage reservoir, choice of source etc.
  - (ii) Zilla Parishads, MJP, and WMU felt that they were adequately involved.
  - (iii) Irrigation Department did not see a bigger role for themselves.

- (iv) The political leaders felt that their involvement would expedite certain aspects such as local disputes, land acquisition, raising of tariff etc.
- (v) Cultivators felt that they were not actively involved. Most of them however did not see the link between agriculture and water supply.

(III) **Ownership of Sources :**

Within the village there are following sources of water;

1. Percolation Tanks - owned by Zilla Parishad;
2. Village Ponds - owned by Village Panchayat;
3. Dug-wells - privately owned;
4. Bore-wells - mostly owned by Village Panchayats;
5. Piped Water Supply - owned by the Village Panchayat/Zilla Scheme. - Parishad.

In most of the Project villages major sources are owned by private individuals. Though there are some restrictions on the extent of water extraction, a very large percentage of the available groundwater is used for irrigation. This has a natural effect on the water table in the public wells which provide drinking water to the villages. Due to inadequacy of subsoil water however, the number of new wells being constructed is very small. As regards Piped Water Supply Schemes three schemes are being executed out of which one has been partly handed over to the village panchayat.

There are no formal forums for decision making specifically with regard to water resources either in the village, block or district level. At the State level, there is a Water Resources Authority chaired by the Chief Minister of Maharashtra to take decisions in an integrated manner. However, for individual schemes there are some formal forum available. For example, Community Lift Irrigation Schemes have been executed after formation of Co-operative Societies which are governed by the Co-operation Laws. The PWSS for a village is managed by the Village Panchayat under the Village Panchayat Act. In case of Regional Schemes (catering to more than one Village Panchayat), the Zilla Parishads are entrusted with the responsibility of maintaining it. The Village Panchayats, however, do not have any formal forum to air their grievances with regard to regional schemes. They can raise specific issues in the General Body Meeting of the Panchayat Samiti or through their Zilla Parishad and Panchayat Samiti representatives, in the meeting of the ZP and PS respectively. There is also a body called the District Planning and Development Council which is chaired by the District Minister, members of which are elected representatives and officials. This provides another effective forum for the users to air their grievances. Zilla Parishad and Panchayat Samiti meetings are conducted as per the statutory provisions. DPDC does not have a statutory basis but is created through a Government Resolution and is quite effective. Minutes of all these forums are drawn up and acted upon.

In the State level Water Resources Authority, all users, stakeholders are represented through the departmental Secretaries. Some experts in the field of water resources management are also members of this forum.

At the District Planning and Development Council, almost all the facilitator stakeholders are represented, but very few user-stakeholders. Similar is the case for the Zilla Parishad and Panchayat Samiti bodies, where the direct beneficiaries are at best represented through their elected leaders.

In the Project area, to manage the distribution network within the village, Water Supply Committees have been formed. This is now given a statutory status by Govt. of Maharashtra. The General Body of the Village Panchayat nominates 50% women, representatives of the weaker sections and users from various parts of the village on this body. They have been assigned large number of responsibilities which include monitoring of the works during execution, preparing the community to receive benefits from improved quality of water, and pay for its maintenance. Location of stand-posts to ensure equitable supply is also an important function of this Committee.

Since the Village Water Committees have come into existence since last three-four years, its administrative back-up systems are yet to be fully established. Secondly this Committee being recommendatory in nature, cannot take action. This is done by the Village Panchayat head called Sarpanch is also normally the head of the Village Water Committee which provides a link between the two bodies. All elected women members of the Village Panchayats are also members of the Village Water Committees thus adding strength to the decisions taken by the Committee.

#### **Conflict Management :**

Conflicts are normally settled within the village in either the Village Panchayat or the Village Water Committee. Sometimes unresolved issues are taken up with the block level officials or the popular bodies. Representations to the Ministers, District level officials and the elected leaders is a normal feature of conflict management.

#### **Kavthemahakal Case Study :**

*The Village was facing acute scarcity of drinking water in most of the summer seasons. Since the pressure was low, a number of households resorted to using of small pumps which were directly connected to taps. This reduced pressure in the system even further. Repeated attempts by the Village Paanchayat to confiscate the pumps failed. Finally they approached the District Collector to direct the Maharashtra State Electricity Board officials to interrupt the power supply to the village between 6.00 A.M. - 8.00 A.M. when the water was being distributed to the village. This proved to be effective.*

**Principle 6: *Striking a gender balance is needed as activities relate to different roles of men and women***

Any discussion on gender must necessarily begin with an understanding of the socio-cultural context we are talking about. In the exceedingly complex scenario that is rural India, the variables of class, caste, religion, age and marital status mediate the ways in which women suffer from gender discrimination within the household, in society and in the market. A poor, landless, widow from a minority religion or belonging to one of the lower castes among the Hindus, is said to be among the most severely disadvantaged groups in rural India. Since married women from landed households<sup>1</sup> don't necessarily fare any better in terms of rights and entitlements, despite surviving husbands, the issue of gender differences and disparities are extremely relative and have to be judged contextually for them to have any relevance.

There is increasing emphasis on community participation and the involvement of women in social sector service delivery projects. NGOs are using more participatory methodologies to involve different members of the community in project activities. Yet, despite heavy investments in time and money, women's participation continues to be constrained by their work burden, poor access to information and lack of credible local representation.

## **1. Gender and Planning**

Cognizance of the importance of Gender in planning has been late in coming in all sectors in India. Gender needs analysis, at the planning stage, is especially crucial in the water sector as women in rural India have traditionally played the role of user-managers of water supply within the household and in the community. The design of MRWSSP is such that major decisions and planning remain the domain of the government, and in some specialised areas, of other project partners (e.g. TISS in some community development activities). The scope for participatory planning is extremely limited given that the community was involved in the project at a much later stage. The emphasis in this project, has been to involve women and the entire community, at every stage of implementation so that the various project partners can gradually phase out, leaving the community to manage the scheme.

### At the Government Level

- The key policy initiatives at the national level for the rural water sector as a whole has been the 73rd Amendment to the Constitution. The devolution of responsibility for operations and maintenance of water supply facilities and of responsibility for cost recovery to the Panchayati Raj institutions, which must now have 33% representation of women as well as proportional representation of Scheduled Castes and Tribes, has created an enabling backdrop for projects supportive of women's strategic gender interests.

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<sup>1</sup> Landed - The term may denote a land holding varying in size from a handkerchief to several acres

- There have been several policy initiatives in the recent past that are of significance to gender in development. The amendment to the Hindu Succession Act, whereby the daughter is now entitled to an equal share in the ancestral property along with her brothers, is one worthy of mention. Since land remains the primary source of livelihoods in rural areas, this measure has tremendous implications for women.
- The Ninth Five Year Plan proposed by the Government of India, contains some specific references to ensuring the role of women and women's organizations in 'social infrastructure' including water supply<sup>2</sup>.
- Maharashtra was the first state in the country to formulate a Women's Policy in June 1994. This resulted in creation of a separate department for Women's Development. Local popular institutions were statutorily required to earmark 20% of its own resources for women's development. The Policy document also enabled the women to close down a liquor shop if it caused any nuisance.
- The 1995 White Paper on Water & Sanitation does have one or two references to women, mainly regarding meeting their practical needs by providing latrines or community toilets.<sup>3</sup> There is also one reference to non-traditional operations and maintenance work done by women in the repair of borewells by women's groups.<sup>4</sup>
- **The recently held State level Gender Workshop<sup>5</sup> has made a commitment to begin looking at recommendations for addressing gender issues in the sector.**
- Individual officers of the Project Planning and Management Unit, WSS and engineers and government officers at the district and block level had not given any special thought to gender at all, and said that it had never figured in any meetings in their entire association with the project. If it were to figure now, it would be because the funding agency had brought it on the agenda.<sup>6</sup>
- At the district and block level there is immense variation in perceptions on gender making it quite impossible to ascribe a certain degree of perception to any one level of planner or decision-maker. An executive engineer interviewed felt that the current approach in the project was adequately rewarding regarding gender and that he had not given any special thought as to how gender sensitivity could be further promoted in the scheme.<sup>7</sup> On the other hand, a CEO in the project area has evinced a strong interest in undertaking an in-depth gender-impact analysis to assess the impact of the project on women's productive, reproductive and community management roles.<sup>8</sup>

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<sup>2</sup> GOI, Draft Ninth Five Year Plan, 1 57.

<sup>3</sup> GOM, Drinking Water Supply Programme, White Paper, 26th July, 1995, para 46, pg. xv

<sup>4</sup> IBID Pg 97, para 9 13

<sup>5</sup> State Level Gender Sensitisation Workshop, - organised by TISS, 5th July, 1997

<sup>6</sup> Patkar, A, Gender Strategy Consultancy- DFID, Interviews with BDOs, EE, PPMU, May, 1997

<sup>7</sup> TISS interview with EE, Jalgaon, July, 1997

<sup>8</sup> Presentation by CEO-Jalgaon, State-level Gender Workshop, July 5, 1997

## The Donor Agency - DFID

*The challenge for the India water sector programme is to ensure that meeting practical gender needs (an immediate priority for primary stakeholders) translates into contributing to strategic gender interests.*

- All donors acknowledge the centrality of water, sanitation and health to the lives of women and girls. The arguments for involving women as well as men in planning and management of water supply interventions for greater project success are universally well received. What is more difficult is to take the seemingly logical step up to work from practical gender needs i.e. providing safe drinking water closer to women's homes (and thereby reduce their burden) to addressing strategic gender interests such as an increased voice and role for women in decisions (related to water provision, costs, maintenance, new designs and facilities, etc.) leading to increased awareness and a better position in society.
- In June this year, the Water & Sanitation Office took an honest look at the objectives and scope of its WSS projects all over India.<sup>10</sup> There was a realisation that very practical, implementable recommendations needed to be evolved in order to operationalise the verbal commitment to gender within the Water Office and to prioritise this commitment with Project Partners. **What is distinctive, is the new focus in the DFID strategy on ensuring that DFID's own attitudes, values and internal structures reflected gender equality objectives and ensured that the WSO collectively considered ways in which to internalise these objectives in the office and in project work.** The resulting Gender Strategy Framework sets out a time frame for achieving initial identified objectives within the Water Office as well as in projects, with indicators for measuring achievement.

## **2. Differences in the degree of participation and decision-making between men and women.**

While participation in project activities by women is observed to be quite high, it is too early to establish whether this will translate into increased decision-making power. Women Sarpanches, VWPs or VWC members are increasingly observed to be coming forward and articulating needs and even taking action.<sup>11</sup> On the whole, however, men continue to be the main decision-makers, especially where the decisions are of a financial nature.<sup>12</sup>

### Percentage of Stakeholders on decision-making bodies that are women

The Village Water Committee is the locally elected body responsible for collecting water taxes, for effective operations and maintenance of the system within the village and for resolving conflicts related to water collection, etc. The recent rapid assessment carried out by TISS revealed the following information regarding numbers of women on committees.

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<sup>9</sup> WSO, DFID, "Draft Gender Strategy Framework", July, 1997

<sup>10</sup> Gender Strategy Workshop, Mussourie, June 12-14, 1997

<sup>11</sup> Discussions with ATISS field staff, BDOs, etc

<sup>12</sup> Patkar, A Gender Strategy Consultancy, PSP meeting with TISS & TASK

**Representation of women (as a percentage) on VWC's in 41 villages**

<b>No. of villages</b>	<b>Representation of Women (%)</b>
<b>14</b>	<b>40 - 50 %</b>
<b>22</b>	<b>50 - 60 %</b>
<b>3</b>	<b>60 - 70 %</b>
<b>2</b>	<b>above 70 %</b>

Source TISS - Field Survey, 50 village scheme of Amalner-Dhule Taluka, July 1997



### Composition Of Village Water Committee in 42 Village Scheme, Talwel Group

	SC/ST	Other	Total
<b>Male</b>	52	152	204
<b>Female</b>	76	153	229

Source: Kumar, A, Presentation - Gender Worskhop 5/07/97

The recent TISS field survey and other records indicate that the 50% representation of women on VWCs has been met throughout the project. However there is still considerable resistance to women being appointed as main Village Water Persons as the figures below indicate for reasons varying from the nature of the post which is remunerated and hence coveted, to reservations on the part of the women themselves or of the community about their ability to perform satisfactorily.

### Profile of Village Water Persons, 41 Village Scheme, Talwel Group

	Main	Standby	Total
<b>Male</b>	37	24	61
<b>Female</b>	3	35	38

Source, Ibid

- While the 50% representation of women on VWCs (a DFID requirement), has clearly been met, there is still much to be achieved in terms of capacity of these women VWCs to effectively execute their functions. Training efforts and special on-going support are envisaged in order to strengthen these women VWC members.
- For women agricultural labourers time is a crucial issue. Initially water was available at a very inconvenient time (9 a.m. to 3 p.m.). These timings had been arbitrarily decided by their Gram Panchayat. However, after approaching their VWC, the timings were revised by the GP. These women felt that they could approach the VWC for any water - related problems.<sup>13</sup>
- Despite efforts to ensure that some of the women on VWCs belong to the SC/ST community, there have been reports of opposition from the community to women VWC members. (See overleaf)

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<sup>13</sup> TISS focus group discussions with women returning from the fields, Varkhed, Madgaon, Manvi & Salsingi, July, 1997

### Case Study of Smt. Sarubai Koli, Sarpanch, Jamathi Taluka, Jalgaon<sup>14</sup>

She became Sarpanch following the 33% reservation for women

She belongs to the Scheduled Tribe

She is not respected by the male Gram Panchayat members

She is harassed by the opposition party male members with the help of their womenfolk. They wash their clothes at the standpost, hoping that she will pick up a fight which can be utilised to remove her from the post of Sarpanch.

She handles these situations with courage and does not get into direct fights but takes the help of the police who help her out.

Her husband is politically neutral. He is a liquor vendor and she assists him..

She resorts to legal means for redressal of grievances and fights for her rights.

She is being advised by a retired village development officer.

Her community women are passive supporters.

#### Percentage of meetings timed to suit both men and women.

Various project reports on community development state that efforts are made to hold meetings in the evenings when daily wage labour such as women agricultural labourers, would be present. However the government staff that works hand-in-hand with TISS traditionally follows a 10 a.m. - 6 p.m. schedule. In addition, the large number of villages in the project area, the necessity of scheduling several village visits in one day, project implementation deadlines and other logistical difficulties make it quite unviable to plan all meetings around the convenience of the local women. As a result, it was observed<sup>15</sup> that crucial events in the project cycle such as the handover event are scheduled in the morning hours (between 8.30 a.m. and 12.30 p.m.) when women are busy either with household chores or at work in the fields. Only older women are sometimes able to attend. While it is not possible to estimate the percentage of meetings scheduled to suit women, it can be said that special efforts were made at the time of the Internal Distribution process to ensure that small groups of women in different localities were informed and involved in the locating of standposts. Meetings for the pilot sanitation project (PSP) have similarly been observed to have been rescheduled for a more time to encourage a better turnout.<sup>16</sup>

### **3. Do approaches promote equal participation and access to resources for both men and women?**

People's "responsible" participation in MRWSSP was identified as an important and necessary component to ensure the sustainability of the project. The main area of participation was identified as the operations, maintenance and repairs of the scheme and of regular payment of water cess to meet recurring expenses.<sup>17</sup> Given the above

<sup>14</sup> Mr Anoop Kumar, CEO, Jalgaon, Presented in Gender Workshop, 5th July, 1997

<sup>15</sup> Patkar, A, Gender Strategy Consultancy, May, 1997

<sup>16</sup> Id

<sup>17</sup> Datar, Chhaya & Joshi, Shruti, Community Development Consultancy with a special focus on rural women and drinking water projects & challenges, Unit For Women's Studies, TISS, Mumbai, pg. 111

aims of community development activities, the mandate for gender becomes quite limited - to ensuring that women play a role in the management of the scheme. When we look at more challenging areas such as access to resources, this may or may not be an outcome of project activities. For instance, active women VWC members, may ensure that women of all disadvantaged groups are allowed to fill sufficient water. The project is not however taking on the issue of intra-household allocation of available water or of distribution of available water between boys and girls within the household or even of equitable division of water-related household tasks between male and female members of the household. Thus it can be said that if participation were to be the yardstick by which gender sensitivity were to be measured, MRWSSP would score quite well.

#### Efforts to facilitate Women's Participation in Rural Water Supply Management.<sup>18</sup>

- Meetings are scheduled according to the convenience of the community and of women in particular wherever possible. This has meant trying to schedule meetings in the evenings in order to enable women and men (especially agricultural labour) to attend and also changing the venue if required.
- Local opinion leaders (Sarpanch, Gram Sevak, etc.) were encouraged to elicit the support of their womenfolk to help the TISS team and the government officials to encourage female participation in initial meetings.
- Culturally appropriate venues were selected, where women would feel encouraged to gather for meetings. Since the Panchayat office has traditionally been a male-dominated space, the local temple was usually the venue of choice for initial meetings. Gradually as women gained confidence, the venue was shifted to the Panchayat office.
- Meetings were cancelled and rescheduled, if enough (50%) women were not present.
- VWCs were reconstituted wherever the mandatory 50% women members requirement was not met.
- The field staff of the support organisations was headed by women. This had a good demonstrative effect on the village folk.

#### Gender Specific Activities that differentiate between men and women

Special and concerted efforts have been made to hold separate workshops and training courses for women where they are required to practise new skills and take on non-traditional roles. These include:-

- Special training for women VWCs with on-going refreshers and support
- Training for women elected representatives
- Training of Women Masons under the PSP
- Workshop for women BLT members
- Workshop for ICDS staff

#### **4. Gender Sensitization Programmes at different levels**

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<sup>18</sup> Ibid, pg 114

Most externally funded development programmes in India are quite emphatic about the need to target Gender as a focus area. The Water Office, DFID is no exception. Traditionally, government-prepared water supply projects are infrastructure-focused, with little thought given to women's roles in water supply management. In the case of MRWSSP, DFID added on the community development component to what was essentially a hardware package. Introducing the concept of gender, later in the project cycle always proves extremely difficult - given the sensitive issues it evokes and the very real problems of capacity and willingness to look at gender needs with objectivity and honesty. Gender, as a concept, is entirely new for government and gender equality - almost a foreign concept, in a traditionally patriarchal society where women have very few rights and entitlements. It is relatively easy to gain acceptance for increased women's participation in water supply management on the grounds of increased project efficiency. Thus gender equality, as a project aim, - is often limited or even sacrificed in the interest of just getting ahead with project implementation in general.

#### Water & Sanitation Department, GOM

- **State Level Gender Sensitization Workshop**, July 5, 1997. This one-day workshop organised by the community development consultants to the project, was attended by senior government officials from Water Supply & Sanitation and Health, representatives from the Water Office, DFID as well as all the officers of the DFID Local Support Office set up for the project. The objectives of the workshop were quite sector-focused given the professional interests of the participants and the limited duration of the workshop. They were:

*To arrive at a common conceptual understanding of the importance of gender issues in water supply and sanitation projects.*

*To apply this understanding to an analysis of gender needs in the current project*

*To formulate recommendations to crystallize the WSS Departments' commitment to gender in the project.*

*To put Gender on the agenda of the Water & Sanitation department*

- **Workshop outputs & commitments:**

1. Formation of a Core Group on Gender at the State Level
2. Appointment of a Nodal Officer to this Core Group

Workshop recommendations to be discussed further and translated into policy.

### District level Activities

- TISS, the CD consultants organised a Gender Sensitization Workshop for Government Officials associated with the Project, in Nashik on 28th July, 1997.
- A further workshop for Nashik and Jalgaon districts is planned for the 29th-30th of August 1997.

### Block Level Activities

TISS organised a three-day Gender Workshop for Government Functionaries (Block & District level) in December, 1994. Themes discussed were<sup>19</sup>:

- Difference between sex and gender
  - Gender specific roles and effects
  - Gender differentiation in productive, reproductive and social activities
  - Resources women need to participate in project-related activities
- Action plan to develop gender awareness among government employees

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<sup>19</sup> TISS, Training Compliance Report, January, 1997

## Village Level Activities

- Women Village Water Persons Training: This training followed a general training of all VWPs (women and men). It was felt that there was a need for separate training for women VWPs given the new and non-traditional roles a VWP would have to perform. As part of this training, the first two sessions were spent in general awareness raising about women's condition and position in society. The participants were encouraged to articulate their problems and needs and also to talk about their strengths. The morning sessions stressed confidence building among the women members to prepare them constructively for the criticism or opposition from the community that their functions might elicit and to be able to discharge their duties effectively. The afternoon session focused on training in the various duties of the Water Person using actual models<sup>20</sup>.
- It should be noted that there have been no specific gender sensitization efforts targeting **men** at the village level. Without awareness and support on the part of the male community, women are currently unable to take on new responsibilities with confidence. Also new skills acquired by women through training sessions, cannot be sustained without paid opportunities to practise these skills in a supportive environment. The training of women masons in Kawlane village was reported to be unsatisfactory due to some of the above reasons.<sup>21</sup>

## Key Recommendations

Recommendations specific to this project were developed by the participants at the State Level Gender Workshop in Mumbai.<sup>22</sup> The following are some general recommendations that follow from the lessons learnt in MRWSSP.

- It is always harder to introduce gender later in the project cycle. Attempting to do this leads to resentment and confusion among project partners who consequently accord it a low priority.
- Since gender is a new and somewhat foreign concept in India, it is important to establish an uniform level of conceptual clarity on the subject among project partners and agreement about gender-related project objectives.
- Assigning a distinct and separate budget for gender in projects, would help it to assume new significance among implementing agencies
- In the WSS sector, water is an important entry point towards achieving other practical gender needs. These aims and objectives must be identified early in the cycle by all project personnel.
- The project must honestly set out the extent to which it will try and address women's strategic gender interests.
- Men need to be sensitised first.
- Need to prescribe a minimum proportion of women amongst the field staff.

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<sup>20</sup> Participant Observation, gender Strategy Consultancy, May, 1997

<sup>21</sup> Gharat, Baban, Case Study of Training of Women Masons, June, 1997

<sup>22</sup> State Level Gender Workshop organised by TISS, 5th July, 1997

## **Principle 7    *Capacity Building is the key to Sustainability***

Capacity Building is an integral feature of MRWSSP at all levels for all project partners - - GOM, TISS, DFID project staff, Consultants associated with the project, village, block and district-level organisations and individuals associated with the project (VLT, VWC, Anganwadi Sevika, Mukhya sevika, Medical and Health Officers, etc.).

**The distinctive feature of the community development efforts is the concurrent focus on capacity building of government functionaries who interact with the community as representatives of the government and of the community itself. This has meant that capacity building is a slow, patient process with small but imperceptible gains to show for large investments in human resources and time. However, the focus of these efforts is on sustainability and as such, very real attitudinal changes though difficult to pinpoint, are what these activities hope to achieve.**

### 1. Percentage of budget spent on training

Approximately 2 % of the total project expenditure has been spent on training<sup>23</sup>. This excludes all training overseas.

### 2. Percentage of Persons trained through MRWSSP

The numbers trained to date in the project would not be indicative of existing capacity in the project for several reasons - the primary one - often identified in projects as a major training constraint, is that of frequent transfers of project personnel. Thus, recently, for instance, several key project officers in the Health/Training departments have been transferred outside the project area. Similarly officers who have gone on overseas training courses have also been transferred outside the project. If capacity building efforts have to be measured in relation to project activities only, it would be impossible to evaluate the gains. However, perhaps, the broader (somewhat costly) alternative can be taken, of measuring individual gains in capacity to deliver in social sector activities as a whole. i.e. where personnel trained may have an opportunity to utilise their new skills in other projects although transferred officials, do not necessarily remain in the same sector or even in a closely related area of work.

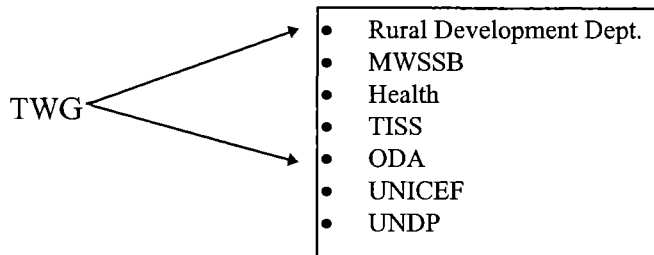
### 3. Training Philosophy

The training Strategy evolved with the formation of a Training Working Group (TWG) composed of persons from all the concerned departments and agencies to plan training strategy, identify training needs, design modules and identify training material and prepare training manuals to facilitate replication

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<sup>23</sup> Total Project Expenditure to date = Rs 43 crores  
Training Expenditure to date        = Rs 80 lakhs

## Composition of Training Working Group<sup>24</sup>



Tasks accomplished by TWG:

- Assessed the training needs at all levels of all departments
- Selected officials for training events abroad
- Assessed existing training programmes for utilisation in MRWSSP
- Generated awareness about new, participatory training methodologies
- Monitored the progress of the training schedule
- Conceived the training strategy to be followed

### • **The Cascade Model of Training**

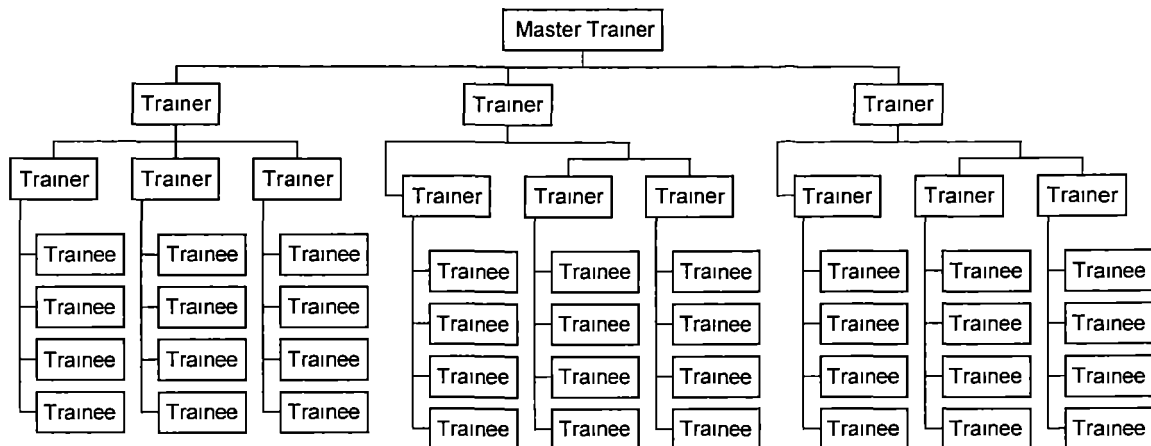
This kind of model aims to eventually reach large numbers to be trained. Through rigorous and systematic training of a few key trainers (TOT), who then train larger groups, large numbers of project personnel are eventually trained. The drawback of this methodology is the inevitable dilution in form and content of messages by the time they reach the bottom tier of the cascade. There is also very little room for innovation and adaptation to circumstances and participant profile in this type of model. This type of model is however, useful in large projects where immense quantities of information (usually about the project) has to be relayed quite quickly so that project implementation can proceed smoothly.

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<sup>24</sup> *Training Compliance Report*, TISS, January, 1997



### The Cascade Model of Training



- **Capacity Building through Community Development**

The community development consultants accompanied by the block and village level government officers undertook various activities in the implementation process together. The evolution of attitudes and gain in mutual respect along the way between these partners is revealing in itself. On the one hand, the CD consultants, prone to blaming government for any problem associated with the programme, have gained an understanding of the complexities of dealing with large schemes while being a part of a rulebound bureaucratic machinery. For the other part, Block development Officers, Executive and Superintendent Engineers interviewed said that once they had overcome their initial resistance, they found the participatory methodologies extremely useful and accurate as regards detailed village resources at the time of internal distribution of standposts or that their increased rapport with the community facilitated greatly communication and hence effective trouble-shooting.<sup>25</sup>

Thus at the village level, this was dual pronged focusing on local government functionaries and also on developing the willingness and capacity of the community to undertake the operations and maintenance of the scheme.

- Village Level Team training -Village level Government Officials participated in 3-day workshops followed by 3-day refreshers that had the following objectives:-
  1. To build the capacity of village level government officials to manage the village water supply by eliciting the participation of the local community
  2. To give detailed project information to the VLT regarding the importance of people's participation in the development process
  3. To improve communication skills

<sup>25</sup> Patkar, A , *Gender Strategy Consultancy*, May, 1997

The entire process aimed to encourage the participation of the community in the internal distribution process, in making their own decisions about location, constitution of local water committees and in gaining confidence to undertake maintenance, conflict resolution and management.

- Illustrative of these efforts is the process of Internal Distribution (ID). While these are not formal training efforts, they contribute perhaps more to building sustainable capacity at the village level than any formalised sessions could.
- The aim of community participation activities was to arrive at a self-managed and sustainable water-supply system. It was realised that a separate institutional base would have to be established in order to strengthen and sustain people's participation. For this purpose, Village Water and Sanitation Committees were formed in each of the project villages. A four stage strategy was followed :-
  1. VWC activation and strengthening
  2. Active involvement of the entire village community in finalisation of the Internal Distribution System (ID)
  3. Formulation of Village Management Plans By VWCs
  4. Peoples participation in the handover process to the Gram Panchayat by the Zilla Parishad and thereafter in the on-going running of the system.
- Internal Distribution (ID)

The ID process used participatory methodologies to help the community to determine the standpost locations in the villages and to choose an appropriate design from the given set of designs and to monitor the construction of ESRs/GSRs and laying of internal pipelines in the village.

The steps and techniques followed were -

1. Meeting to provide project information to VWCs and inform them of their roles.
2. Village walk to generate curiosity about the project and provide information
3. Gramsabha (village meeting) to provide information about the project and explain the aim of the visit, namely to fix standpost locations. This was done through a combination of techniques such as social mapping, ward/wasti-wise meetings, separate PRAs where needed and small group meetings in the vicinity of proposed locations.
4. Gramsabha -solving of disputes and finalisation of standpost locations.

It was observed that in villages where the project information was disseminated with the help of visual and participatory aids such as PRA maps, the degree of people's participation was higher.<sup>26</sup>

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<sup>26</sup> TISS, *Community Development Activities*, A note on Internal Distribution & People's Participation, Nashik, District.

## Training Overseas

Government officials, consultants and local ODA project staff have been sent on various short courses overseas.

- OOPP for Management for Sustainability (MDF & IRC, Netherlands)
- Hygiene Promotion for Health Officials - (IRC, Netherlands)
- Management Development for Senior Public Health Officials, WEDC, UK
- Social Development Course (Wye College, UK)
- Management - Rural Development (Reading University, UK)

## Transfer of Training Courses

- **Management for Sustainability of Drinking Water Supply Systems** - The transfer of this course has been supported by IRC (with DFID support) to the NRTC - Nashik, a regional training centre located in the project area and undertaking several other training courses for project officials.

This course uses the Objective Oriented Project Planning Methodology to undertake a participatory problem analysis with all parties involved to identify and analyse those problems they see as inhibiting progress and to prepare a concrete and realistic plan for tackling these problems. The 21 day course includes two field visits, seminars and discussions on various technical and social project-related issues and one week developing an individual action plan. Participants are invited to come and share the results of their action plan with their colleagues three months after the course.

### **Principle 8 :**

In India water so far was considered to be gods gift. The question for paying for it was, therefore, somewhat sensitive. In some parts of India, even now water is not taxed by the Government. In the city of Calcutta, only connection fee is charged and water is available free of cost. With growing population, electrification of all the villages, and subsidised power, abstraction of surface and groundwater was much faster than the last decade. Sources which were closeby dried up and people had to walk long distances to fetch water. Water which was naturally available close by, had to be fetched after incurring considerable hardship. Water schemes therefore had to be executed. Present policy of the Government is to provide water within a radius of 1 KM. from the village. By and large, those villages which faced hardships understand that a cost is associated to bringing water from a distance. Their preparedness to pay also is much higher.

### **Tax Recovery :**

(a) **Water tax:** The Village Panchayats levy the water tax within the village.

Rate of recovery varies widely from village to village. There are villages which have recovered 100% tax as against those whose recovery is only 15-20%. Water is made available either through private connections or through a public stand-posts. Recovery from the private connection holders range from 60-100%. Recovery from the PSP users is rather dismal.

(b) **Irrigation Cess :** Irrigation as started earlier, is from private sources such

as wells. No tax is levied on abstraction of water from such sources. State level figures on recovery of irrigation cess since 1989-90 to 1994-95 is indicated below:

(Rs.in Million)

Year	Demand	Recovery
1989-90	202	90
1990-91	142	120
1991-92	251	123
1992-93	298	190
1993-94	262	228
1994-95	276	208

(c) **Tax on Industrial Use:**

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(II) **Tariff System**

**Water Tax:** The rate structure for water tax is as follows :

- (1) Public Stand-post - Rs.18-150 p.a.
- (2) 12 mm Private connection - Rs.360 - 450 p.a.

These rates are leviable in the rural areas since February 1997.

As regards urban areas there are no limits defined by the Govt.of India. The Municipal Body is required to charge water to meet its costs..

Nandgaon town, which is the only town covered in the project area charged a rate of Rs.144/- p.a.They have agreed to raise the same to Rs. 480 p.a. There was no charge on public stand posts. This too has now been revised to Rs.50 p.a. from the current year.GOM has prescribed following annual subscription rates for borewells;

- 1. Borewells with handpumps-
  - a. 1st BW Rs.300
  - b. 2nd. BW Rs.250
  - c. 3rd BW Rs.200
  - d. 4th BW Rs.150
  - e. 5 or more BW Rs.100
- 2. BW with electric pump Rs. 1000

(III) **Cost Recovery:**

**Capital Cost:** The Rural Water Supply Schemes are presently fully funded by the State Government. In the earlier years, the villagers were required to pay 10% capital contribution. This was waived since the villages could not afford to pay for it.

**O&M Cost :** The Government however expects that the scheme be self sufficient in term of meeting the O&M cost.

The schemes in the project area being regional in nature, would be maintained by the Zilla Parishads. JPS Associates, Management Consultants,carried out financial forecasts in respect of two schemes in Jalgaon and Nashik districts. Nashik scheme shows a deficit of Rs.3.97 Million in the first year. However, the scheme starts making a surplus from 5th year onwards. Jalgaon scheme shows a deficit of Rs.5.55 Million in the first year and is not likely to generate a surplus for the next eight years.

In general however, most of the individual (one village) schemes are able to meet the O&M cost. Only in case of major repairs that they approach the Zilla Parishads which assist the Village Panchayats from its Maintenance and Repair Funds.

**Replacement Cost:** Most of the Village Panchayats have very meagre resources. It therefore cannot provide for depreciation in its budget. Minor replacements are borne by the Panchayats but major replacements are required to be supported by the Zilla Parishads. Some of the Zilla Parishads insist on 25% contribution of the Village Panchayats before releasing money from the M&R account.

(IV) **Cost Subsidies:** There is no system of costs subsidy for the poorer communities. However, most of the poorer communities feed on the public stand posts or hand-pumps, recovery against which is rather inadequate to meet O&M expenses. In that sense there is an element of unwritten subsidy.

(V) **Transparency of Financial System:** The range within which tariff is to be levied is fixed by the Government. Within the spectrum, Village Panchayats have authority to levy water tax. In the survey conducted, it was found that most of the users know the amount of tax payable by them, but they were not very familiar with the tax structure or the rationale behind it. In the Project villages however, the village water committees have been trained to prepare budgets and arrive at the tax rate. The system is now becoming more transparent.

(VI) Most of the respondents stated that the water tax is high. This was mainly because the new rate structure was introduced only in the current year. The present rates are Rs.360/- p.a. as against the previous rate of Rs.150-200 p.a. In spite of replying negatively to the hike, almost 60% of the respondents indicated their willingness to pay. Most of the others stated that they would pay if they get water with adequate pressure at their taps.