

**Study of Water Sector Projects in
Maharashtra
(Case studies of selected villages)**

**Prepared by
DROP, Pune
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1. Summary of the study

1.1 Introduction

Water is a central issue in the process of development. Each year large amount of money is spent by various agencies, to satisfy the basic need of drinking water and for providing water for irrigation.

In spite of these efforts, one third of the population in Maharashtra face drinking water problem. It is estimated that by 2030, 70% of the land available for cultivation will continue to be rain fed.

It is now widely accepted that decentralised interventions in water management holds a key towards satisfying present as well as future water demand, especially in rain-fed areas.

Since independence, government as well as non-government agencies have tried to address this issue. Most of these approaches are relevant, innovative, original and dynamic. Government and non-government agencies have co-operated and have complemented each other's work. Yet scarcity of water and problems related to water distribution appear to be perpetual.

It is therefore necessary to increase the efficacy of interventions, especially of those taking decentralised approaches for water management.

In Maharashtra dedicated NGOs and committed individuals have demonstrated path-finding experiments in Watershed Development (WSD) and in decentralised water management. These model projects are few but they certainly provide pointers towards future direction of the sector. There is a need to understand these experiments to assess the potentials of scaling up, with specific reference to the sustainability of the impacts of these interventions.

With this understanding a study of fifteen such endeavours in all agro-climatic zones of Maharashtra was undertaken by DROP, Pune for GSDA, Government of Maharashtra. UNICEF supported the study. The list of projects studied can be found in Annex I.

This note briefly discusses findings of this study. The note also deliberates different aspects of emerging issues related to water problem at the village level.

It is hoped that a wider discussion on these issues by people working in this field will lead to suggestions on modifications for future, more effective interventions and for sustainable outcomes.

Out of the 15 projects studied, 11 are related to watershed development approach whereas 4 are other innovative approaches related to water sector. List of the projects selected is can be seen in annex I.

1.2 Methodology

A multidisciplinary team visited each of these projects. Data was collected from secondary sources as well as by interviewing key informants. A detailed survey of 10% of the households, selected using stratified sampling technique was conducted in each of these villages to collect relevant primary data.

Each village was studied for the following four aspects:

1. **Impact Assessment:** Qualitative as well as quantitative indicators pointing change in standard of living of the villagers before and after the intervention were assessed as a part of this study. Changes in terms of drinking water, agriculture, irrigation, fodder and fuel were surmised.
2. **Process of change:** Each of these villages has followed a unique path of progress. This study has understood these processes and has identified typologies based on these processes.
3. **Institutional arrangements:** Institutional arrangements before, during and after the implementation of projects are crucial for sustainability of these interventions. This study has critically analysed these arrangements in each of these villages.
4. **Socio-political situation:** Socio-political situation in a village reflects upon the decision making process in the village and ability of different sections of the society to take part in this process. This study gives insights into ability of the villagers and its leadership to take up such a task.

1.3 Findings of the study:

1.3.1 Impact assessment:

This study confirms the findings of earlier impact assessment studies.

- Watershed development intervention has ensured availability of drinking water in these villages.

- Cropping pattern and yields have changed after the interventions. All the villages show increase in area under cultivation during Rabi season and a shift towards cash crops.
- Availability of fodder has increased however, it has effectively translated into considerable increase in dairy activity in only 2 of 11 watershed development projects. In other projects the dairy activity has sustained. Free grazing of cattle is still widely practised in many villages.
- Wood and farm waste remains the main source of fuel in these villages. Some of the villages continue to depend on forest for supply of fuel wood.

For ensuring sustainability of these changes, one of the villages has taken conscious efforts for management of the demand for water by controlling extraction of ground water. It was revealed that management of demand for water is crucial for sustainability of these changes.

1.3.2 Process of change:

Typologies in the development processes emerge depending on the agency that initiated the process in the village. It was observed that

- In 4 villages the Panchayat leadership took initiative for change. In 3 of these 4 villages an empowered Gram Sabha supported their efforts.
- In 5 villages NGOs took initiative for change.
- In one village a government official from the department of agriculture has taken the initiative for change.
- In 4 villages a local NGO and beneficiaries together have formed 'user groups', and have worked to address a particular problem perceived by the beneficiaries.

1.3.3 Institutional arrangements:

Each of the processes described above has evolved different institutional arrangements.

In 4 villages, the Panchayat leadership proactively responded to the demand of the villagers. The village leadership took initiative to motivate and organise villagers. They contacted a suitable Project Implementing Agency (PIA) for carrying out necessary works for conservation of water. The PIAs were responsible for fund management and were answerable to the funding agencies. The responsibility of operation and maintenance (O & M) now lies with the villagers and with its village leadership. The sustainability will depend on the ability of the village to mobilise necessary resources whenever required. It was observed that in 3 of the 4 villages the Gram Sabha is

empowered and has a tradition of mobilising resources for village development. Whereas in one case the project implemented has a provision for maintenance fund and thus the village leadership have some resources at their disposal for operation and maintenance. However, in this village Gram Sabha does not play an active role in decision making. The sustainability will hence depend on the ability of the village leadership to carry out effective, efficient and transparent work whenever required.

In NGO led villages the NGOs motivated and organised the villagers. They promoted an ad-hoc committee or a Village Watershed Committee (VWC) to facilitate participation of the villagers. These VWCs worked very effectively and efficiently to implement conservation activities in the village. These VWCs were entrusted with further O & M activities. It was observed that these VWCs depend heavily on the NGOs. These ad-hoc VWCs tend to become defunct without any support from the NGO.

In villages where the government department has taken initiative for change, the department has carried out activities for water conservation following standard procedures. The Gram Panchayat is expected to take up the responsibility of further O & M. However, it was observed that the GP and the villagers perceived that the department has built the structures and so they should take care of the structures.

In 'user group' approach, the NGO facilitated technical support and initial capital investment. These projects mainly deal with proper utilisation of the developed resource for maximising benefits. The responsibility of O & M depends on the beneficiaries. In some cases the NGO has facilitated formation of institutional arrangement for O & M and has imparted necessary training to the group. It was observed that these groups have successfully carried out O & M responsibility, as it was mutually beneficial to all. However, in cases where the group was unable to resolve disputes, the group failed to take up O & M responsibilities. Also sustainability of these groups depends on sustainability of the water source used by the group.

In conclusion, the village by and large depends on community action for conservation of water. This ensures availability of water in the village. Grassroots level statutory community institutions or the Panchayat Raj Institutions have a potential to provide sustainable activities for conservation provided,

- (a)** The villagers (or the Gram Sabha) have ability to discuss, take collective decisions and mobilise necessary resources.
- (b)** The village has responsive and a responsible leadership
- (c)** The bureaucracy is sensitive and answerable.

Once the availability of water is ensured, a group of villagers can come together and use water in a judicious way provided

- i. The source is sustainable
- ii. The group can mobilise initial capital investment,
- iii. The group is able to resolve internal disputes.

1.3.4 Socio-political situation:

From the above discussion it is clear that the ability of the villagers to collectively take informed decisions is crucial for sustainable actions. This in turn depends on-

1. *Ability of villagers to participate:* It was observed that women and land-less villagers do not participate actively in decision making. Male farmers of all castes have the ability to participate.
2. *Platforms available for participation:* Gram Sabha is a statutory platform available for participation in decision making. The study reveals that in 3 villages it is mandatory for at least one member of each family to participate in decision making. In other villages only 40% of the men attend this meeting whereas women very rarely attend this meeting.

Other platforms where villagers come together are mainly of religious nature (bhajani mandal). For women Bachat Gat is a platform available in the village. However, in many cases its activities are restricted to money transaction.

3. *Opportunities to gain knowledge:* The villagers need to gain information so as to be able to discuss all aspects of any issue. It was observed that in most of the villages less than 20% of the households read newspapers regularly. Ownership of radio and TV sets is increasing with increasing prosperity, however, they are perceived more as a status symbol. Travelling to different places also adds to exposure and hence increases possibility of access to knowledge. It was observed that villagers mainly travel to places of pilgrimage. Further, frequency of visits to Taluka and District headquarters is higher amongst men than amongst women.

Thus the conventional modes of gaining knowledge play limited role in dissipation of information. It was observed that the NGO and the enlightened village leadership effectively act as knowledge link to the village.

1.4 Emerging issues:

In the light of the above discussion following issues emerge. A wider discussion on these issues will lead towards constructive change at the policy level and in implementation of programmes related to decentralised water management.

◆ **Should the process of initiating a project be in 'response to demand'? and how to generate such a responsible demand?**

In case of projects that are beneficial for the entire community (like watershed development projects), those projects initiated by the Panchayat leaders as a response to the community need and demand have worked effectively. Further, as the project matched perfectly with the demand, villagers and its leadership have taken the responsibility of the post project operation and maintenance.

Gram Panchayat leadership has a mandate for development of the village. They are answerable to the villagers and hence have to deliver what is expected of them. The Panchayat leadership should formally articulate the demand for a project and should own the responsibility of an intervention.

The accountability of Panchayat leadership is crucial for the success of project initiated by the Gram Panchayat. An empowered Gram Sabha will demand such accountability.

Also the Panchayat leadership should have a skill to rationally understand the physical and social context of the village, potentials and constraints faced by the village and ability to prioritise realistic demands of the village.

Role of government officials should also change, as PRIs are expected to take a lead role in implementation of any project for development of the village. Support, capacity building and appraisal are new functions for the government actors.

◆ **How to strengthen and build capacity of Gram Sabha and Gram Panchayat?**

The study reveals that a combination of committed and responsive Panchayat leadership and an aware and empowered Gram Sabha leads to success in the development of a village.

Some important issues for strengthening and capacity building of Gram Panchayat and Gram Sabha are:

1. Empowering weaker sections of the society and women to take active part in decision making process.

2. Bringing in transparency and accountability in decision making of Gram Panchayat (GP). This will depend upon-
 - Capacity and willingness of Gram Sabha to proactively govern affairs of Gram Panchayat.
 - Ensuring availability and accessibility of knowledge and information to every person at the village level. The structured knowledge and information sharing mechanisms are thus crucial.
3. Training programmes for Panchayat leaders to effectively plan and implement development projects in water sector.

In the demand responsive approach GP should have a responsibility and line management function in the project implementation. In this context as well, the capacity building of GP and Gram Sabha is very crucial.

◆ **What is the role of NGOs?**

NGOs have played a key role in water sector reform process. Their role was highlighted in development of second generation watershed management guidelines of GOI and also in restructured guideline for Watsan sector.

The role of NGOs as innovators, demonstrating new techniques and approaches is also very important.

Replication and scaling up of the programs call for large-scale efforts and convergence of strengths of all actors. The strength of NGOs has been working with communities, process facilitation and knowledge link.

In the new paradigm of demand responsive projects the responsibility of implementation lies with Panchyat Raj Institutions.

The Capacity building of these statutory institutions is the big challenge and NGOs can play a crucial role in the capacity building process.

Knowledge management processes and systems is another key area where NGOs can play a key role.

◆ **How to resolve conflicts within the groups? Within the village? Between two villages?**

In the projects that addressed the utilisation of the water resource, the function of conflict resolution is key factor in the success of the project. There can be various options at various levels.

This study has not explicitly focussed on these options. However during the study it was sensed that these types of conflicts will become prominent and there is a need to evolve mechanisms to address these issues.

2. Learning from the Experience

DROP, Pune and GSDA, government of Maharashtra undertook this study project with the aim of understanding various issues related to decentralised water management at the village level. This endeavour involved in depth study of 15 selected villages in Maharashtra, representing all its agro-climatic zones. The UNICEF supported this study.

On May 17, 2003 a daylong workshop was organised jointly by GSDA, UNICEF and DROP to discuss emerging issues based on findings of this study. The participants included eminent personalities working in the field of water management at the village level. It included those working in non-government organisations as well as in government structure. A list of participants can be seen in Annex II of this booklet.

Hon. R. R. Patil, Minister, Rural Development and Water Supply & Sanitation department, government of Maharashtra was the chief guest of this meeting. Hon. Ratnakar Mahajan, Vice chairman, State Planning Board, Government of Maharashtra was present at this meeting. Many other distinguished experts and officials were also present at this meeting.

A brief note explaining the findings of the study along with a comment on emerging issues was circulated amongst all probable participants two weeks prior to this meeting.

Mr. Radheshyam Mopalwar, Director GSDA, Government of Maharashtra first introduced the objectives of the study and briefly commented on the villages selected for this study. Mr. Ajit Phadnis from DROP, Pune, presented findings of the study to this gathering and introduced emerging issues to be discussed in this meeting.

Ratnakar Mahajan appreciated the study and noted that the study was driven by a problem to be addressed and that it was not a theoretical exercise that aimed at abstracting the reality. Based on his experience, he commented that one of the basic reasons for our underachievement in water sector is our misinterpretation of 'Welfare State'. According to him, a Welfare State helps its subjects to achieve their own aspirations. However, its present interpretation is more of a State that provides for all the demands of its subjects. This according to him needs to be changed. The present form of 'representative democracy' has failed to deliver the expected and hence should now be changed to 'participatory democracy'. NGOs should work as a facilitator and as a catalyst during this change. The hostility between the non-government agencies and political leadership must get resolved and they should work together towards achieving 'participatory democracy'. Such a system based on responsible citizens will be able to address all the problems confronted by the society.

Mr. R. R. Patil addressed the congregation by observing that despite all the efforts and expertise present in Maharashtra, the state today has to depend on maximum number of tankers for supply of drinking water. This according to him was due to cropping pattern promoted in the state. He however observed that it is not possible to change it overnight and also observed that it is difficult to change things that are now established amongst the society. A political consensus across all parties and awareness amongst all the citizens will help addressing these issues. He observed that a new breed of young, educated and enthusiastic politicians is emerging at the grassroots level. Empowerment of these emerging leaders will hold the key to future success of policies. Commenting on possibility of replicability of the success achieved by 15 selected villages, he observed that promoting these villages as par-superior has created a mindset that it is not possible to replicate these islands of excellence.

Following this address, the participants enthusiastically participated in the debate to suggest future actions.

It was pointed out that various interventions orchestrated by the NGOs were to address a particular or a set of problems faced by the villagers. These problems many a times were related to achieving livelihood security and to satisfy basic needs of the people. It was also observed that in many cases the government machinery failed to deliver the expected. In reaction to it the NGOs intervened to facilitate delivery of facilities as well as services necessary for the village society. This approach has definitely benefited the villagers and it is possible to observe the change it has induced in economic as well as social conditions. However, it is important to see these changes in the context of the region. Each region has its own history and character and the change has to be judged with due consideration to this regional context.

It was noted that the NGOs in the village society many times induced the changes. Villagers generally responded to these changes, in other words the process of change did not originate amongst the villagers. There is a need to change this approach. The new approach should be focussed at empowering people to take initiative to address to problems faced by them.

It was also observed that although NGOs show excellent results in some villages, they could not reach all the villages. It is the government machinery that has all-inclusive reach and the mandate for change. It is hence necessary that the NGOs and GO should work in partnership towards achieving a common goal.

On a positive note it was observed that it is possible to replicate success by considering village as a unit of development. It should however, be noted that it is important to take due note of regional disparities. Considering this disparity, it is possible to develop more than a dozen number of models of development. Each village then can choose a model for its development.

2.1 Demand Responsive:

While discussing specifically on issues related to water sector it was repeatedly observed that it is necessary to take an integrated approach towards management of water resources at the village level, including issues related to sanitation and management of demand for water. Further it was observed that there is a need to give attention to supply as well as demand side of water supply. The approach so far is focussed at ensuring supply of water, there however is now a need to give urgent attention to issues related to management of demand of water. It is necessary to educate our farmers regarding the concept of water balance and choice of crop in compliance with it. Such awareness will help towards achieving the much-needed change in mindset of the villagers. NGOs should contribute as a facilitator and in building capacities of the people to achieve this objective.

The group agreed that the intervention should be in response to the demand put forth by the people. Efforts should be made to raise responsible demand at the village level. An elaborate procedure to identify such responsible demand should be developed.

On a more practical note, it was suggested that there is a need to evolve a set of incentives as well as disincentives to villages, which will guide them to take actions for successful water management. Secondly, the allocation of funds should be more efficient and focussed. Also there is a need to implement acts like 'ground water legislation act' more effectively.

2.2 Capacity building:

Mr. Popatrao Pawar while describing his experiences assured that it is possible to manage demand as well as supply side of water at the village level provided the villagers are made aware and are active participants in decision making process. Transparency in decision making, constant vigilance about development actions and timely availability of funds are key issues at the village level to ensure development.

Mr. Madhav Bhandari, observed that awareness amongst villagers and its representatives is pre-requisite to any participatory development approach. In the existing situation, capacity building of villagers and its leaders is necessary for effective participation. NGOs can play an important role in achieving the same. An elaborate strategy of training should be developed and advocated. In addition to this observation it was noted that besides capacity building of Panchayati Raj Institutions, it necessary to educate MP/ MLA as well as all levels of bureaucracy. Further, it was suggested that special efforts are required to educate media regarding issues of development.

It was suggested that each MLA should be given responsibility of strengthening at least one Panchayat in his/ her constituency.

2.3 Conflict Resolution:

The group also paid attention to macro issues of water allocation at the basin level. It was agreed that the disparities in allocation of water amongst its competitive users needs to be addressed more rationally and in a transparent way. The idea of ad-hoc 'Water Resource Regulatory Authority' at the basin level was heavily criticised. It was observed that such an ad-hoc body might be useful as a short-term solution. However, in the long run the political process has to guide the problem of allocation in a democratic way.

2.4 Role of NGO:

The group proclaimed that historically NGOs have played an important advisory role in social development and has provided guidance from time to time. The NGOs will continue to play this role at present and in future.

The role of NGO as implementers is a limited one. NGOs should not be considered as mini-contractors, but they have a noble role to play.

NGOs should be more careful about their role and the Government should not take them for a ride. One of the responsibilities of NGOs is to influence government policies for betterment of the society.

Capacity building, monitoring and evaluation, demonstrating innovative approaches for development, facilitating livelihood security of the economically weaker sections of the society, empowering socially deprived section of the society including the women are some of the roles NGOs should play. It was observed that NGOs should have courage to withdraw at appropriate juncture from the programmes that they are running.

NGOs can work with the Government only on an equal partnership basis.

Based on these consultations following recommendations were suggested.

3. Recommendations

1. Watershed management and decentralised water resource development projects should be demand responsive.

The process adopted for selection of villages for implementation of the water sector project is critical for the success of the project. For effective operation and maintenance of the assets created in the village, the villagers should own and should have the feeling of ownership regarding the infrastructure developed in the village. This feeling is important for effective management of local resources and for sustainability of the impact of any intervention.

For success and sustainability of water sector interventions it is important to select villages that are ready to 'own' the assets created in the village. It is necessary to devise indicators to identify such villages. One of the criteria could be a demonstration of accepting financial responsibility of operation and maintenance of assets already present in the village. Villages that have performed meritoriously in campaigns like 'Sant Gadagebaba swachhata abhiyan' could be given priority in selection.

A village thus should be capable of collectively making 'informed choices'. It is hence necessary to carry out an intensive phase of Information-Education-Communication (IEC) prior to the selection process. This phase should ensure that all the stakeholders are informed and are aware of their roles and responsibilities in the project. Villagers should then be able to take decisions regarding any intervention. Villages taking initiatives and demonstrating their ability to take up responsibility for development should be encouraged in later stages. Such an informed decision-making process will ensure distribution of responsibilities regarding operation and maintenance of the assets created in the village.

2. The water projects should have an integrated approach incorporating water quality issues.

Currently, watershed management projects augment water making villages tanker free. In other words, watershed management projects ensure availability of drinking water in villages. However, it is important to ensure quality of drinking water to achieve betterment in health conditions of the villagers. Awareness generation for reducing risk of microbiological contamination and hygiene promotion should be an integral part of the water project

3. The water projects should have an integrated approach incorporating water demand management mechanisms.

In villages where availability of water quantity has increased due to various interventions there is a threat of uncontrolled non-optimal use of water leading to scarcity. It is hence necessary to manage demand of water in a village. In other words it is necessary to influence individual choices for betterment of the society. Social pressure exerted by a village society can achieve this. As demonstrated in Hivare Bazar, this can be achieved by the Gram Panchayat and by the Gram Sabha. The Gram Panchayat should take conscious efforts and develop regulating mechanisms for management of demand of water. The Gram Sabha can create social pressure influencing individual's choices. The Gram Sabha should be formally consulted while planning the project and it can be one of the preconditions of the selection of village for support.

4. Gram Panchayat and its statutory subcommittee should be in line management and should be responsible for project planning, implementation and post implementation management.

Post implementation management of assets and developed resources is an important factor for ensuring sustainability. The grassroots level institutions of governance i.e. the Gram Panchayat and the Gram Sabha has a potential to take up such a responsibility. These institutions have mandate to develop and manage natural resources of the village. These institutions should hence be made primary stakeholders in the process of natural resource development.

Gram Panchayat and its sub-committees have the statutory responsibility of natural resource management. These bodies should be empowered with necessary financial and administrative powers.

These bodies should be able to work effectively, efficiently and in a transparent way. It is hence necessary to build capacities of the Gram Panchayat members. Further, to induce accountability in decision making it is necessary to build capacity of the Gram Sabha.

5. User group approach for effective utilisation of available / developed water resource should be promoted.

User group approach for effective utilisation of resource backed by effective governance can produce sustainable impact. Common tangible interests bind user groups. These groups are hence able to device set of rules and institutions for sharing of a resource, mutually benefiting all its members. Such groups can develop facilities for sharing of a water resource with external technical and financial support. These groups are then able to ensure service by abiding to rules framed by the group. For sustainability of these groups it is necessary to have a mechanism for resolving conflicts emerging within the group from time to time.

These user groups should be linked with the Gram Panchayat. The Gram Panchayat should govern and regulate the relationship between a user group and rest of the village community.

6. Knowledge sharing mechanisms accessible to the communities should be promoted.

Villagers are collectively expected to take informed decisions regarding natural resource management in the village. Villagers hence should have easy access to information in order to understand all aspects of any issue prior to taking part in decision making process. The study shows that the conventional modes of dissemination of information have limited use. It is hence necessary to evolve knowledge sharing mechanisms accessible to communities. NGOs should play a key role in this process.

This is a continuous process and should be promoted during planning, implementation and post implementation stages of any project.

7. Effective communication strategy should be developed and adopted for water resource literacy campaign.

In case of water management in a village, the villagers are expected to manage both the demand as well as supply side of water in the village. In order to achieve this successfully, they are expected to take informed decisions at each stage. This will be possible only when villagers are aware of various issues related to water in the village. In order to achieve the same there is a need to device and execute effective communication strategy regarding water resources. It is important that every stakeholder is made aware of all the issues related to water.

This also is a continuous process and should be promoted during planning, implementation and post implementation stages of any project. NGOs should play a lead role in this endeavour.

8. Capacity building of Gram Panchayat members, its statutory subcommittees and of Gram Sabha should be taken on large scale for managing water resource of the village.

Village leadership is expected to play a pivotal role in decision making regarding natural resource management. The leadership hence should have a skill to understand physical and social context of the village, to identify potentials and constraints faced by the village and to rationally prioritise necessary actions to overcome stressful situation in a village. They should also have necessary information and administrative skills to implement any scheme in the village.

The village leadership represented in the Gram Panchayat and its statutory bodies should undergo training programmes prior to implementation of any scheme. Government and non-government agencies should work in co-operation to achieve the same. Many of the government agencies have expertise in a particular field, the expertise and infrastructure available with them should be augmented with the expertise and infrastructure available with non-government agencies to achieve the above objective. A pool of organisations such

as NRTC, WALMI, MERI, NEERI, GSDA, Agricultural Universities, KVKs etc can work towards achieving the objective.

9. NGOs should be involved to build capacity of the Panchayat, other village level institutions and should work as a 'knowledge link'.

In the past, NGOs have effectively worked towards educating village leadership and in introducing villagers to new knowledge and skills. This demonstrated capacity of NGOs should be strengthened and used towards empowering villagers to collectively take informed decisions for development of the village.

NGOs should be involved in capacity building of village level statutory institutions. They should be encouraged to act as a continuous 'knowledge link' before, during and after the implementation of any scheme.

10. NGOs should play an effective role towards empowerment of weaker sections of the society and women to take active and responsible part in decision making.

It is observed that despite all effort so far, women and marginal communities are not actively involved in decision making process at the village level. NGOs should act towards capacity building of women and other weaker sections to enable them to play effective role in decision making.

11. Government officials should be trained to make them sensitive towards various issues related to development of a village.

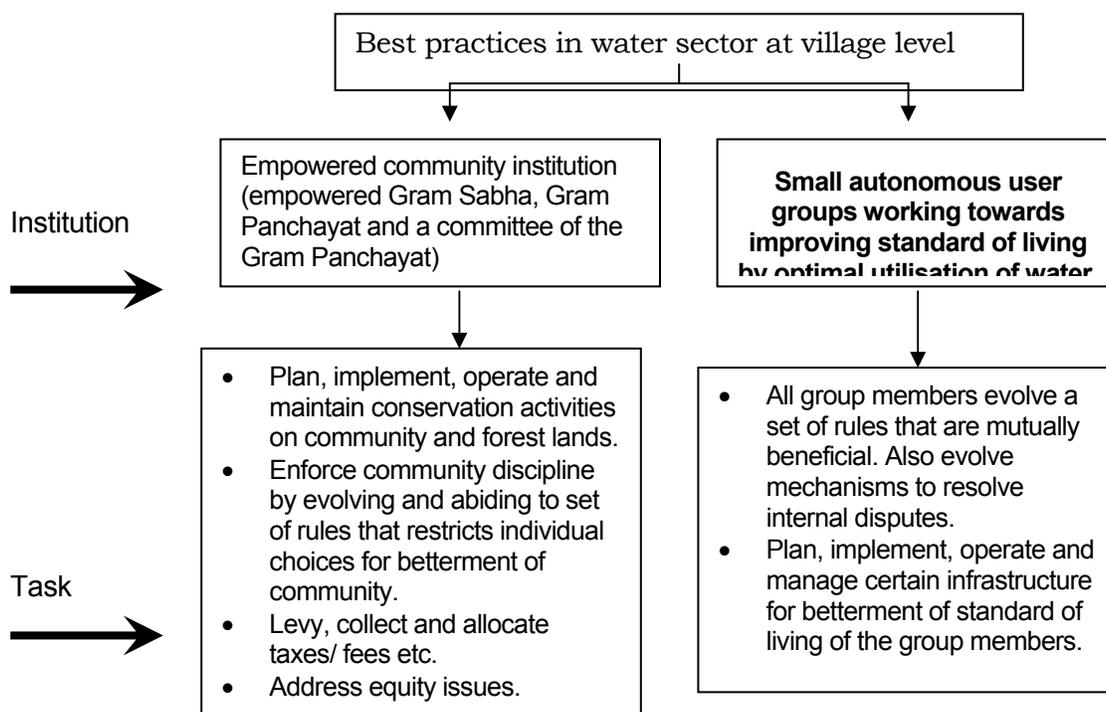
Government officials at all level should be educated to induce social orientation necessary for performing their duties effectively. They should also be trained to impart necessary technical skills for sustainability.

4. Best Practices/ Learning from the study

4.1 Approach:

There is a need to evolve a system to govern water resource at the village level. This needs two pronged approaches. On the one hand there is a need to promote conservation activities to ensure availability of water, whereas on the other there is a need to promote individuals and/ or groups to maximise produce by optimal utilisation of water resource.

In other words there is a need to strengthen a community institution, preferably the statutory institution of governance i.e the Gram Panchayat and there is need to promote user groups with the aim of securing livelihood or improving upon standard of living.



4.2 Goal and Strategy

Goal

Empower villagers to develop and manage water resources in optimal and sustainable way.

Strategy

Empower Gram Sabha and Gram Panchayat for collective action for effective, efficient and transparent development and management of water resources.

Support and facilitate implementation of collective actions decided by the Gram Sabha and its leaders regarding water sector.

Generate responsible demand for water supply facilities by different user groups for drinking water and for irrigation.

Support and facilitate user group actions.

Empowering Gram Sabha and Gram Panchayat for collective actions for effective, efficient and transparent development and management of water resources needs multifarious approach. These activities should be aimed at behavioural changes and at increasing confidence amongst all sections of population to take active and responsible part in decision making process. It has already been demonstrated that it is possible to achieve this by intensive efforts. Currently, NGOs and local leadership is facilitating such intensive inputs necessary for transforming villages. However, multiplication of their success will need number of such facilitators as well as large amount of resources.

For efficient use of available resources it is necessary to identify villages that would respond more readily towards further change in individual behaviour and in collective decision making process. To identify such villages for further inputs, it is necessary to stimulate village leadership to demonstrate ability of the village to take responsible collective action. The activities for the proposed programme will start with a phase necessary for identification of villages for further intensive inputs. Following table describes these activities in more details.

4.3 Activities for development of water sector

4.3.1 Proposed activities to identify villages for further intensive inputs

	Activity	Purpose	Assumptions
Pre campaign	1 Identification of all probable participant villages	To define and identify scope for further action	All villages do not need interventions related to water sector or certain set of villages need more immediate and water specific actions.
	2 Planning for scheme/strategy for selection of villages	To detail out the process by which villages are to be selected. At this stage assessment criteria and procedures for such a campaign should be elucidated. This should also include decisions regarding incentives that would stimulate village leadership to demonstrate performance of a village for responsible collective actions.	Experts would be able to chalk out a detailed plan for the same. There already is such a precedence in the form of selection of villages for 'Sant Gadge Baba Swachhata Abhiyan'
Selection of villages	3 Dissemination of information about the campaign	To reach out all possible villages to inform them about the campaign.	Tools like posters, films etc. is available in sufficient quantities. Government machinery, political leadership as well as other conventional modes of communication are available for this purpose.
	4 Dissemination of supportive information	To stimulate and support villages to participate in the above campaign by disseminating relevant information effectively and efficiently. .	Tools like posters, films etc. is available in sufficient quantities. Innovative communication facilities and services are used to reach out to maximum number of villagers. Information about various aspects of different issues related to water sector is disseminated.
	5 Assessment and selection of villages	To select villages for further more intensive actions	Impartial and rational selection criteria and procedures are available and are acceptable to all the participant villages.

Following activities should be carried out in such carefully selected villages. This is only a list of activities and sequence of these activities should be carefully planned.

4.3.2 Proposed activities in a village:

Purpose of each of the proposed activity

	Activity	Purpose	Assumptions
	1 Training programme for facilitators	To sensitise facilitator about the process of change in a village and the role facilitators are expected to play in it. To impart skill training necessary for conducting PRA, micro-planning exercise etc.	Infrastructure, experts and training material necessary for this activity is available and is accessible.
Pre selection IEC activities	2 Poster campaign	Make villagers sensitive about the following <ul style="list-style-type: none"> Responsibility of development and management of water sector now lies with the village. 	<ul style="list-style-type: none"> Posters and films are ready and available in sufficient quantities. Facilitator can evolve a debate after a film show and can guide the debate to evolve list of suggestions regarding management of water resources in the village.
	3 Film shows with a discussion after the film	<ul style="list-style-type: none"> Villagers have a responsibility to make its leaders and bureaucracy answerable Need to curtail individual's choices for betterment of entire community Make villagers aware regarding hygienic use of drinking water resources and promotion of hygienic practices. 	
	4 Lecture series in the village	To inform villagers regarding <ul style="list-style-type: none"> Concepts of 'water balance'. Need for necessary actions for maintenance of water balance. List of actions necessary and its implications. Means and ways to understand physical context of the village 	<ul style="list-style-type: none"> Villagers are ready to understand water issue in their village Villagers are ready to listen to the experts.
	5 PRA exercise with different sections of the society	<ul style="list-style-type: none"> To help villagers articulate and understand physical and social context of the village. Identify potentials, constraints, lacks, gaps, mismatches related to water sector in the village. Based on this understanding and suggestions emerged in the village, the leaders should be able to evolve list of action necessary to reduce stressful situation in the village 	<ul style="list-style-type: none"> Facilitator is able to conduct PRA exercise in the village Villagers are willing to participate in such exercises. Tools for participatory micro-planning exercise are available Facilitator is able to use participatory micro planning tools. All sections of the society has ability to participate in such exercises
	6 Participatory Micro-planning exercise	<ul style="list-style-type: none"> It is important to educate villagers regarding need to pay tax and justification of the amount of tax estimate. To evolve strategies for managing supply and demand for water and for hygiene promotion in the village in a participatory way. 	
	7 Exposure visit for elected members and other leaders of the village.	Sensitise leaders about <ul style="list-style-type: none"> Their duties and responsibilities. For successful management of water resources, the leaders need to think beyond party politics and there is a need to evolve consensus. Discuss various other issues of concern perceived by the leaders. 	

		Activity	Purpose	Assumptions
	8	Village demonstrates its ability to take and implement responsible decisions for betterment of water situation in the village.	The initiative for change should come from the village leadership. The awareness creation stage should be carried out in all potential villages whereas further activities should be promoted in villages that demonstrate willingness and ability to contribute towards change without any external assistance. This could be O/M of facilities already existent in the village or new activities to promote hygienic conditions in the village.	Village leadership is visionary and does not organise a 'show' of such initiative or Evaluation mechanisms for identification of such villages can detect villages willing and able to take responsibility for their own development without any error.
	9	Formal expression of responsible demand by the village leadership	To identify necessary activities that needs capital investment and external technical inputs.	Village leaders are able to identify relevant and necessary activities taking note of the outcomes of the PRA and micro-planning exercises
Capacity Building of local leaders	10	Training of elected members and other leaders of the village for preparation of action plan for management of water resources	To discuss and seek guidance regarding issues like <ul style="list-style-type: none"> ▪ Possible sources helpful for strengthening financial resources with the Panchayat. ▪ Duties and responsibilities of bureaucracy and how to make it work for the village. ▪ Imparting skills necessary for preparing plan for development of natural resources 	<ul style="list-style-type: none"> • Leaders are willing to participate in such a discussion. • Resource personnel are available to guide such a discussion • Facilitator has an ability to conduct such an exercise
Planning and construction of structures for conservation	11	Preparation of water resource management action plan	Development of facilities for conservation of water requires inputs from various experts. Such experts should be invited to prepare action plan and financial estimates for development of activities for conservation of water. Village leadership should supervise this activity and should approve the plan after discussion. Findings from earlier pra and micro-planning exercises should be incorporated in this plan.	<ul style="list-style-type: none"> • Technical expertise is available. • Villagers are able to mobilise financial resources to hire these experts. • Facilitator is able to introduce the villagers to appropriate agency.
	12	Construction of structures	Village leadership should decide on implementing agency and should monitor implementation. They should take a lead role in mobilisation of financial, human and physical resources within the village.	<ul style="list-style-type: none"> • Village is able to mobilise finances for implementation of this activity. • In case of need facilitator is able to provide guidance
	13	Devising arrangements for ensuring post construction operation and maintenance.	After completion of construction activities, the structures built for conservation of water or plantation activities carried out in the village needs to be monitored continuously. The village also has to take certain actions to successfully operate and maintain assets created in the village. The village hence has to evolve a strategy for the same. This should be given due consideration while planning construction activities in the village (i.e. Activity 11).	

		Activity	Purpose	Assumptions
Water use arrangements	14	Identify available and potential sources of water.	The water available in the village needs to be used efficiently and in an equitable way. In many cases farmers need to share a source for irrigation. Such groups need to be identified and promoted.	Village leadership and facilitator are able to assess and estimate potential of such sources and are able to identify viable groups.
	15	Identify villagers who can share various sources of water in an amicable way.		
	16	Potential user groups organise their own meetings and invites facilitator if required.	One of the factors necessary for sustainability of these user groups is the ability of its group members to take collective actions. Formation of such groups and selection of its members should be left to the participants. The initiative to form user groups should come from the beneficiaries. External agencies then should support these groups for provision of technical knowledge and for mobilisation of financial resources if necessary.	
	17	Evolution of set of rules to be obeyed by the members including the arbitrating authority. Registration of these groups.	This will institutionalise the activities of the group and will help in seeking institutional finances. This also will be helpful in case of resolution of any disputes within a group.	
	18	A meeting between the Gram Panchayat and the user group	The relationship between a user group and the Gram Panchayat should be articulated. The tax/ royalty charged by the Gram Panchayat should be negotiated formally.	
Planning construction of structures for usage of water and its O/M arrangements	19	Mobilisation of resources.	In order to use a common source it is necessary to develop facility for distribution of water available in the village. It is necessary to mobilise adequate capital investment as well as to seek technical experts to install such a facility.	Facilitator is able to guide these groups to technical experts as well as to sources of finances. Group members are able to decide and assert themselves whenever necessary
	20	Preparing plan for implementation		
	21	Construction of facility		
	22	Identification of people necessary to ensure service	Sustainability of these user groups will depend on their ability to monitor use of water by its members, their ability to carry out routine operation and maintenance of the facility installed. In many cases the group will have to institutionalise these mechanisms by identifying and training necessary personnel for the same.	Necessary training facilities are available and are accessible.
	23	Training of these personnel.		

4.4 Roles for activities to identify villages for further intensive inputs

			Facilitator	External funding agency	External technical experts	Zilla Parishad	Panchayat Samiti	Gram Panchayat	Gram Sabha	Mahila Mandal
Pre campaign	1	Identification of all probable participant villages		●	●	○	○			
	2	Planning for scheme/ strategy for selection of villages		●	●	*	○			
Selection of villages	3	Dissemination of information about the campaign	*	○	○	●	*	*	*	*
	4	Dissemination of supportive information	*	○	○	●	*	*	*	*
	5	Assessment and selection of villages		○	●	○				

● : Lead role

○: Supportive role

*: Active participation

4.5 Roles for activities in a village

			Facilitator	External funding agency	External technical experts	Gram Panchayat	Gram Sabha	Mahila Mandal
	1	Training programme for facilitators	*	○	●			
Pre selection IEC activities	2	Poster campaign	●	○		○	*	*
	3	Film shows with a discussion after the film	●	○		○	*	*
	4	Lecture series in the village	○	○	●	○	*	*
	5	PRA exercise with different sections of the society	●	○		*	*	*
	6	Participatory Micro-planning exercise	●	○		*	*	*
	7	Exposure visit for elected members and other leaders of the village. (All candidates that contested the last Panchayat elections).	●	○		*	*	*
	8	Village demonstrates its ability to take and implement responsible decisions for betterment of the village.				●	*	*
	9	Formal expression of responsible demand by the village leadership	○			●	*	*
Capacity Building of local leaders	10	Training of elected members and other leaders of the village for preparation of action plan for management of water resources	○	○	●	●		

● : Lead role

○: Supportive role

*: Active participation

			Facilitator	External funding agency	External technical experts	Gram Panchayat	Gram Sabha	Mahila Mandal	User groups
Planning and construction of structures for conservation	11	Preparation of water resource management action plan	○	○	●	●			
	12	Construction of structures	○	○	●	●	*	*	
	13	Devising arrangements for ensuring post construction operation and maintenance.	○	○	●	●	*	*	
Water use arrangements	14	Identify available and potential source of water.	○		○	●	*	*	
	15	Identify villagers who can share this water in an amicable way.	○		○	●	*	*	
	16	Potential user groups organise their own meetings and invites facilitator if required.	○			○	○		●
	17	Evolution of set of rules to be obeyed by the members including the arbitrating authority. Registration of these groups.	○		○	○	○		●
	18	A meeting between the Gram Panchayat and the user group	○			●		○	●
Planning of construction of structures for usage of water and its O/M arrangements	19	Mobilisation of resources.	○	*					●
	20	Preparing plan for implementation	○		●				●
	21	Construction of facility	○		●				●
	22	Identification of people necessary to ensure service	○		●				●
	23	Training of these personnel.	○		●				●

● : Lead role

○: Supportive role

*: Active participation

ANNEX I

List of projects studied

Following projects were studied in this endeavour. Care was taken to select projects representing all agro-climatic regions of Maharashtra and range of initiatives in the field of decentralised water management.

This by no means is the exhaustive list of such projects in Maharashtra. We are aware that there are many more such efforts.

Village Taluka District	Programme	Project duration	Implementing agency	Goal	Objective
Very high rainfall zone with lateritic soils					
Washi terf Devrukh Sangameshwar Ratnagiri	Village Eco Development	1995-1998	Matru mandir	Reducing pressure on forest by developing private and public waste lands	aforestation
Shedashi Pen Raigad	Indo-German	1994-1998	Rural Communes		
Transition Zone 1					
Bhalgudi Mulshi Pune	DPAP Drought Prone Area Programme	1996-2000	Gangotri resource developers Pvt. Ltd.	Drought proofing of villages frequently facing drought like situation	Watershed development
Murukute Bhudargad Kolhapur	Adarsha Gaon Yojana	1996-2001	Shramashakti Pratishthan	Supporting value centred initiative by the villagers by co-ordinating actions of all government departments	Watershed development

Village Taluka District	Programme	Project duration	Implementing agency	Goal	Objective
Transition zone 2					
Mohadi Dindori Nashik	Participatory irrigation management	1990-1992 dam const.- (1979-85)	Samaj Parivartan Kendra	Equitable use of canal water	Formulating water user societies
Mahur Purandar Pune	Community Lift irrigation	1980-1983 MI tank const 1972	Pani Panchayat Gram Gaurav Pratishthan	Facilitating user groups so as to empower them to use water economically	Facilitating formation of user groups and help them adhere to certain principles.
Scarcity Zone					
Hivre Bazar Nagar Nagar	Adarsha Gaon Yojana	1993-1996	Yashavant Krushi Gram Va Panlot Vikas Sanstha	Supporting value centred initiative by the villagers by co-ordinating actions of all government departments	Watershed development activities
Ralegan Sidhhi ⁰ Parner Nagar	COWDEP, CAPART, Jalasangharan		Shree Sant Yadavbaba Shikshan Prasarak Mandal		

⁰ Ralegan sidhhi, is a village in scarcity zone. Anna Hazare, has influenced development of this village. His experiments and achievements in this village has been inspirational to many, including Popatrao Pawar from Hivre Bazar. This village was also hence studied as a part of this project. However, the study was limited to secondary data only.

Village Taluka District	Programme	Project duration	Implementing agency	Goal	Objective
Assured rainfall Zone					
Nagunichi wadi/ Golatgaon Aurangabad Aurangabad	UNICEF	2001	Dilasa	Ensuring availability of drinking water for betterment of women and children	Focussed intervention for strengthening of drinking water sources.
Patnadevi Chalisgao Jalgaon	Adarsha Gaon Yojana	1996-2000	Rashtriya Vanashree Sangopan Sanstha	Overall development of the village and conservation of natural resources	Reducing pressure on forest and watershed development
Bhavthana Ambejogai Beed	Action aid Community Lift irrigation	1990-1997	Manav Lok	Economic development of farmers and better equip them to face recurring drought like situation.	Facilitating users by augmenting resources
Asarkheda Badnapur Jalna	Village Eco Development Indo-German	1996-2001	Marathwada Sheti Sahayya Mandal	Ensuring drinking water availability and Economic development	Watershed development
Ganeshwadi/ kerwadi Palam Parbhani	DPAP Drought Prone Area Programme	1994-1997	Socio Economic Development Trust	Drought proofing of villages frequently facing drought like situation	Watershed development

Village Taluka District	Programme	Project duration	Implementing agency	Goal	Objective
Moderate to moderately high rainfall zone					
Borada Ramtek Nagpur	Jalсандхарण, IWDP (Integrated Watershed Development Programme)	1991-2002	Soil Conservation (Agriculture Department) Govt. of Maharashtra	Integrated approach to Watershed development	Watershed development
High rainfall zone with soils formed of rocks of mixed origin					
Mendha (Lekha) Dhanora Gadchiroli	Oxfam, NGO (an individual)	1998-1999	Gaon Niyojan Va Vikas Parishad	Enabling village community to conserve natural resources	Watershed development, Joint forest management

Highlights from some of the villages

No	Village	Notable change
1	Washi	Earlier 77% ¹ of the households interviewed used a nalla as a source of drinking water. Now 31% of the households have tap in their house whereas 62% use public tap as a source of drinking water.
2	Bhalgudi	Earlier there was no irrigation in the village. Now 15% of land is irrigated
3	Murkute	Earlier all households used public tap as a source of drinking water. Now 89% of the households have tap in their house. Also earlier 38% of the land was left fallow by the farmers, now only 9% of the land is left fallow. The dairy activity also shows an increase, the village now collects about 300 litres of milk daily, compared to earlier 175 litres.
4	Mohadi	Earlier only 33% of the land was irrigated, now 73% of land receives irrigation. Increase in agriculture has induced overall economic prosperity.
5	Mahur	Earlier 20% of the land was irrigated now 46% of land receives irrigation. Also earlier most of the population used open wells as source of drinking water, now 47% of the households have tap in their houses whereas 37% use public tap as a source of drinking water.
6	Hivre Bazar	Land under irrigation has increased from 29% to 64%. Further, in summer, the village used to receive drinking water by tanker. The village is now self sufficient in terms of drinking water. The green cover in the village has increased. This is reflected in increase in dairy activity in the village. The village collects about 3000 lit of milk every day.
7	Patnadevi	Land under irrigation has increased from 30% to 55%. Also 86% of villagers now have tap water in their house.
8	Bhavthana	Land under irrigation has increased from 1% to 14%
9	Asarkheda	This village had a history of receiving water by tanker. Now the village is self sufficient in drinking water supply and 29% households receive tap water.
10	Ganeshwadi	This village had a history of receiving water by tanker. Now the village is self sufficient in drinking water supply and 91% households receive tap water. Area under irrigation has also increased from 5% to 22%.
11	Borda	The land under irrigation has increased from 9% to 35%. This is also reflected in more area cultivated during Rabbi season.

¹ All the numbers are based on the primary data collected from a sample of village population

ANNEX II

List of Participants in the workshop & other consultations

Sr. No.	Name of The Participants	Address
1	Hon. Shri. R. R. Patil	Minister, Water Supply & Sanitation Department, Government of Maharashtra
2	Hon. Shri. Ratnakar Mahajan	Vice President, State Planning Board, Government of Maharashtra
3	Shri. B. C. Khatua	Secretary, Water Supply & Sanitation Department, Government of Maharashtra
4	Shri. Dilip Bund	District Collector, Dhule
5	Smt. Manisha Mhaiskar	District Collector, Sangli
6	Shri. Pravin Darade	Chief Executive Officer, Z.P., Raigad, Alibag
7	Shri. G. T. Bandre	District Collector, Ratnagiri
8	Shri. D. M. More	Chief Engineer & Joint Secretary, Employment Guarantee Scheme Government of Maharashtra
9	Smt. Renu Gera	Unicef Mumbai
10	Dr. M. A. Ghare	AFARM, Pune
11	Shri Popatrao Pawar	Sarpanch, Hivare Bazar, Dist. Ahmednagar
12	Shri Anandrao Patil	ShrimShakti Prathisthan, Kothrud Pune
13	Shri Vijay Borade	M. S. S. M. Aurangabad, Dist. Aurangabad
14	Shri Jayant Patil	M. S. S. M. Aurangabad, Dist. Aurangabad
15	Shri Dwarkadas Lohia	Manao Lok, Ambejogai, Dist. Beed
16	Shri. Kalpana Salunke	Gramgavrao Pratisthan, Hadapsar, Pune
17	Shri K. K. Khatu	Matru Mandir, Deorukh, Dist. Ratnagiri
18	Shri Suryakant Kulkarni	S.E.D.C. Kerwadi, Dist. Parbhanai
19	Shri Santosh Gondalekar	Gangotri Sansadan Vikas Pvt. Ltd. Pune
20	Smt Sunila Gondalekar	Gangotri Sansadan Vikas Pvt. Ltd. Pune
21	Smt Vaishalee J. Khadekar	Dilasa, Aurangabad, Dist. Aurangabad

Sr. No.	Name of The Participants	Address
22	Shri Sunil Waman	Gomukh, Pune
23	Smt. Sushma Deshpande	Erandwane, Pune
24	Shri Madhav Bhandari	Sinchan Sahyog, Jaisande, Sindhudurg
25	Shri. Prasad Sevekari	Kothrud Pune
26	Shri Ajit Phadnis	Drop, Pune
27	Shri. Nilesh Kulkarni	Drop, Pune
28	Shri. Niranjan Khaire	Drop, Pune
29	Smt. Ashwini Lele	Drop, Pune
30	Shri. Ramit Basu	Co-Unicef Mumbai
31	Shri Balu Pawar	Facilitator Watershed Development Program, O'bad
32	Shri Sameer Karwe	Ex-Director, CSV, Wardha
33	Dr. B. F. Hulagur	DGM, NABARD, Pune
34	Shri B. A. Deshmukh	Medicinal Plants Conservation Center, Pune
35	Shri Radheshyam L. Mopalwar	Director GSDA., Pune
36	Shri F. J. Jadhav	Additional Director, GSDA., Pune
37	Shri S. P. Bagade	Joint Director, GSDA., Pune
38	Dr. Shri K. P. Aurangabadkar	Deputy Director, GSDA. Konkan Region
39	Shri S. H. Upadhye	Deputy Director, GSDA. Nashik Region
40	Shri V. K. Bhosale	Deputy Director, GSDA. Pune Region
41	Shri M. S. Vaidya	Deputy Director, GSDA. Aurangabad Region
42	Shri C. S. Gajbhiye	Deputy Director, GSDA. Nagpur Region / Amravati Region
43	Shri. S. N. Kanade	Senior Geologist, GSDA., Pune
44	Shri. B. V. Pawar	Senior Geologist, GSDA., Pune
45	Shri V. Krishnamurthy	Senior Geologist, GSDA., Pune
46	Dr. Shri B. S. Chandrashekar	Senior Geologist, GSDA., Pune
47	Shri U. D. Patankar	Junior Geologist, GSDA., Pune
48	Shri V. N. Bhosale	Junior Geologist, GSDA., Pune
49	Dr. Shri S. K. Thorat	Junior Geologist, GSDA., Pune
50	Shri R. A. Duraiswami	Junior Geologist, GSDA., Pune
51	Shri. C. T. Jadhav	Junior Geologist, GSDA., Pune
52	Shri. B. N. Kulkarni	Assistant Geologist, Pune

Besides the findings of the study were widely discussed in various other forums with number of experts. Following table gives the list of consultations

Mr. Rupert Talbot	Senior Adviser, UNICEF
Dr. Rajan Kotru	GTZ Team Leader, GTZ
A team led by Meena Munshi.	The World Bank
Mr. B. C. Khatua	Secretary, Water Supply and Sanitation Department, Government of Maharashtra.
Mr. Sudhir Thakare	Deputy Secretary, Water Supply and Sanitation Department, Government of Maharashtra.

ANNEX III

Findings of the study in a matrix form

Each of the villages is ranked on the scale of 1 (worst) to 10 (Best) for following indicators.

	Asarkheda	Bhalgudi	Bhavthana	Borda	Ganeshwadi	Hivre Bazar	Mahur	Mendha (Lekha)	Mohadi	Murukte	Naginichi Wadi	Patnadevi	Shedashi	Vashi
Drinking water														
Source index	7	4	5	6	10	8	8	5	6	10	8	10	4	8
Water borne diseases	9	5	7	6	8	9	9	7	10	8	7	9	7	9
Agriculture and irrigation														
Land under protective irrigation	6	2	2	4	3	7	5	1	8	3	7	6	1	2
Land cultivated in Rabi	3	2	2	4	6	7	7	1	7	2	4	6	1	4
Socio-political situation														
Literate voters (male)	2	4	4	8	8	9	8	3	8	10	4	9	5	9
Literate voters (female)	1	2	4	8	2	7	5	2	5	7	3	8	4	4
Attendance in Gram Sabha (male)	3	5	2	6	4	7	3	10	5	5	5	3	8	7
Attendance in Gram Sabha (female)	1	1	1	1	2	3	1	9	1	1	1	1	3	1
Could describe working of Gram Sabha	6	7	2	4	5	10	5	9	6	10	2	6	5	7

	Asarkheda	Bhalgudi	Bhavthana	Borda	Ganeshwadi	Hivre Bazar	Mahur	Mendha (Lekha)	Mohadi	Murukte	Naginichi Wadi	Patnadevi	Shedashi	Vashi
Subscription to news paper	1	3	1	1	1	3	2	1	2	2	2	1	1	1
Radio	4	3	2	2	2	7	3	1	4	4	5	2	1	3
TV	3	2	3	4	2	8	5	1	5	6	8	5	4	4
Visit to other places	6	8	1	3	8	10	9	2	8	6	7	3	6	9
Frequency of visits to Taluka place (men)	4	3	2	3	7	7	3	3	3	6	3	6	3	3
Frequency of visits to Taluka place (women)	1	1	1	1	3	3	1	1	1	3	1	1	1	1
Frequency of visits to District place (men)	5	3	2	2	1	7	3	2	2	1	3	3	1	1
Frequency of visits to District place (women)	1	1	1	1	1	3	1	1	1	1	1	1	1	1
House Tax	8	10	5	8	7	10	9	10	8	10	5	10	9	10
Awareness	4	5	5	8	5	9	7	7	6	7	7	4	5	4

Based on Observations and perception of the team.

Sustainability of village level institutions.

O & M 0 0 10 0 0 10 10 10 10 10 10 0 10 10

Role of local leadership (Panchayat)

Initiative 10 0 0 0 5 10 10 10 10 10 5 0 0 10

85 71 62 80 90 154 114 96 116 122 98 94 80 108

Maximum score 210

DROP

14, Nivedita Apts., 70, Rambaug Colony,
Opp. Chaitanya Health Club, Paud Road,

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Phone: 020-25446659, 25431430