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**Ideal Water Supply at Renawadi Village with
active public participation**



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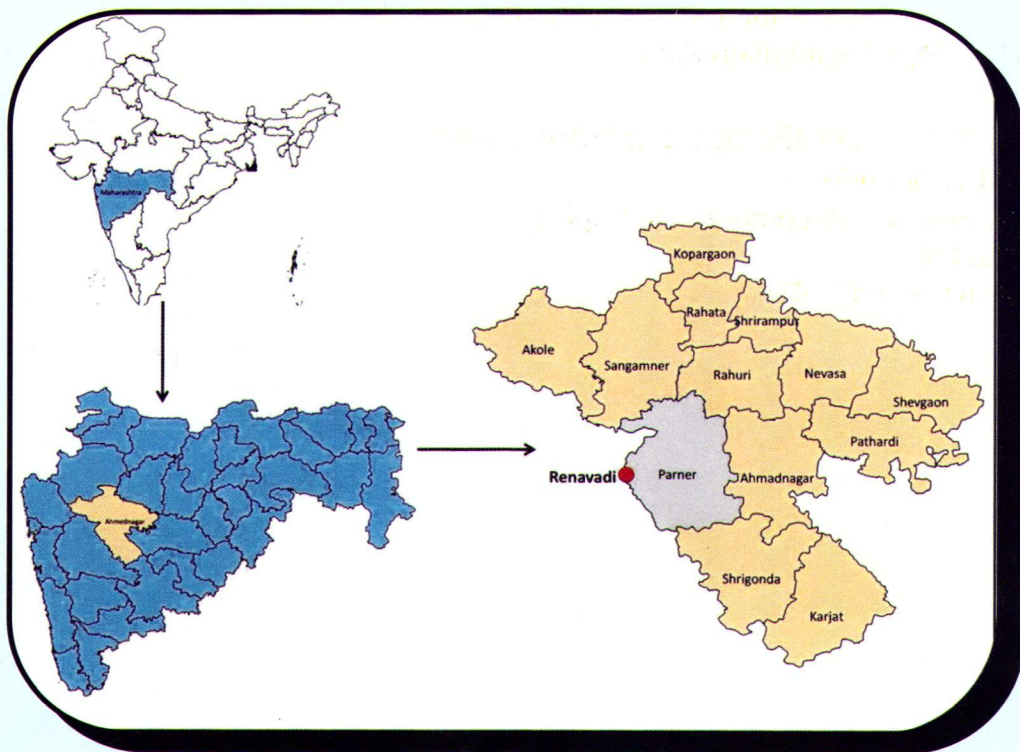
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Location Map

Map 1 : Location of the project village (*Renavadi*)



Introduction

This document maps the process and impacts of the drinking water supply project implemented directly by the Gram Panchayat (GP) sub committee of *Renavadi* village in Ahmed Nagar district of Maharashtra. SEVA, an NGO engaged in rural development, facilitated the project as a Technical Support Organisation (TSO). The project was implemented between 1st January 2008 and 29th November 2010.

This document is based on the study conducted in March 2013 to assess the changes triggered by the project. In the current context of worst drought in Maharashtra, documentation of community driven drinking water initiative such as this becomes even more relevant.

Project Brief

Water is a State subject. Obviously, State Government and its agencies are responsible for managing safe drinking water to all habitations in the rural areas. *Renavadi* project was implemented through the scheme titled *ApalePani (Our Water)- Phase II*. This Rural Water Supply Programme aims at providing potable drinking water in a sustainable way to rural people in the districts of Pune, AhmedNagar and Aurangabad with ultimate objective of improving the health of the people in the area. It involves installation, up gradation and rehabilitation of drinking water supply systems. Simultaneously, it initiates complementary measures such as health and hygiene promotion, sanitation and actions for source protection.

Project Rationale

Apart from local scarcity of drinking water in rural Maharashtra, the *ApalePani* Phase II objectives coincide with international commitments and goals. Particularly it is in line with one of the key target of the Millennium Development Goals (MDGs) to halve by the year 2015 the proportion of people without sustainable access to safe drinking water and adequate sanitation and thereby reducing the burden of associated disease. However, recent statistics indicate that the world is far from achieving it and despite governmental efforts, the situation is still grim in India. Around 22 per cent of households in India lack access to safe drinking water sources, like tap, hand pump and tube well. Consequently, significant efforts are being made by the central and state governments for increasing the coverage of households with adequate and safe drinking water supply, along with sanitation services.

Project Objectives

The project has following stated objective, *"Improvement of health and sanitation conditions through sustainable water supply schemes, complementary measures for watershed and ground water management, health education and empowerment for village based O & M (Operation and Maintenance), with full participation of the villagers in all stages and with participation in capital costs and full cost recovery for O & M."*

As the objective suggests, the project design marks a major policy departure in the water and sanitation sector. It is a shift from a government-led, supply driven approach to a community led, demand-driven and participatory approach with preference to small, localised schemes manageable at local level.

Implementation Structure and flow

The *ApalePani* Phase II, *Renavadi* drinking water project had well designed implementation structure as shown in the Chart no. 1, where roles and responsibilities were clearly spelt out. The funding support came from KfW and routed through the GoI, GoM and ZP directly to VWSC, which was Project Implementing Agency (PIA). District Council that is *Zilla Parishad* (ZP) along with supporting NGO carried out the monitoring of work. A technical support to project was provided by *SEVA* acting as a Technical Support Organisation (TSO). While *Aikya*, an NGO acted as Support Organisation (SO) and was responsible for running awareness campaign and mobilising community, educating Gram Sabha and GP members as well as community regarding project objectives and operations.

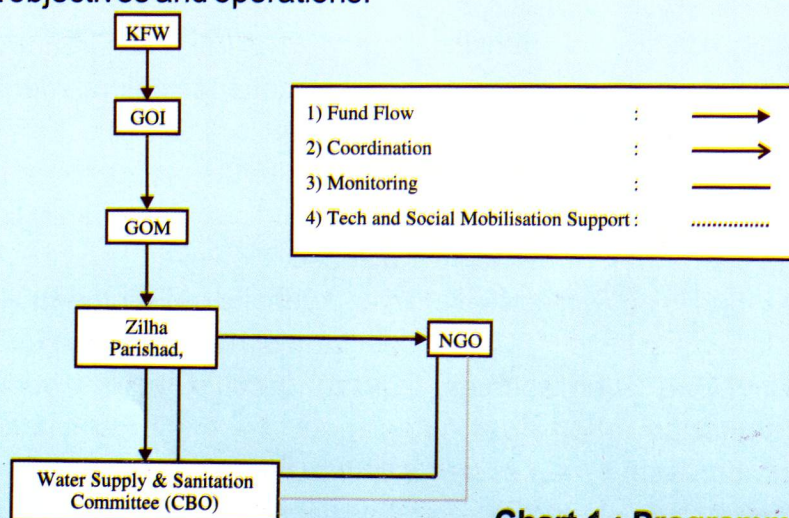


Chart 1 : Programme Flow Chart

Profile of the project village

The project village *Renavadi* is located in the *Parner* block of Ahmed Nagar district of Maharashtra. It falls in western Maharashtra scarcity zone of the nine agro-climatic zones of Maharashtra. The average rainfall in the area is 535.71 mm. The village has 1192 population and 166 households (HHs). The male female ratio is in line with the state average as can be seen in the Chart no. 2. The village diverse population but the general farming caste has overwhelming majority as the Chart 3 shows.

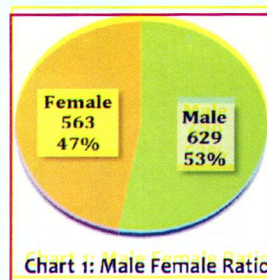


Chart 1: Male Female Ratio

Methodology

This report is based on the primary data collected afresh. A study was carried out in *Renavadi* village in January 2013 to document the process and assess impacts of the project.

The study was both qualitative and quantitative in nature. Consequently, both quantitative and qualitative primary data were collected and used during the study to arrive at findings. Comprehensive household sample survey was conducted to collect quantitative data on the project impacts. A proportionate two stage random sampling method of sample selection was used to cover all segments without compromising objectivity. Pre-tested questionnaire was administered while conducting the

household interviews during sample survey. Additionally a team of principal researcher and FGD expert collected the qualitative data through one FGD, informal discussions with the local Key Informants (KIs) and transects.

Instead of using baseline data collected by the project implementing agency, a recall method was used to measure pre-project situation. Data triangulation was achieved through multiple methods of data collection (methods triangulation) and multiple layers of respondents (persons triangulations). Relevant secondary data and project documents were also referred to understand project process.

Profile of the respondents

As mentioned earlier this document was prepared through study in which a sample household survey was undertaken. The sample size of 30 households (about 18%) was taken for data collection.

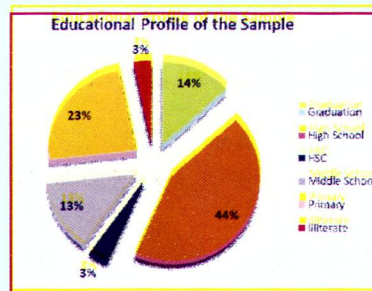
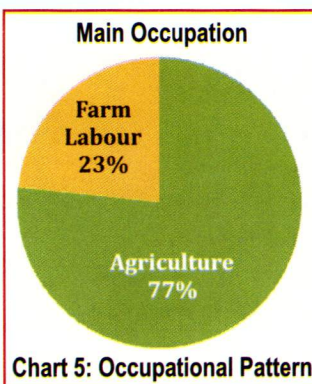


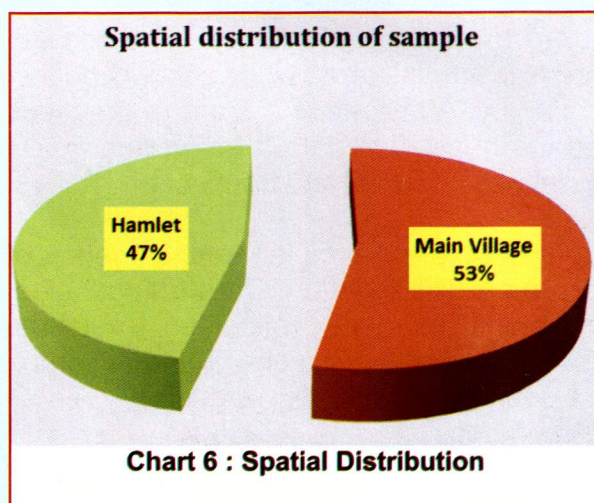
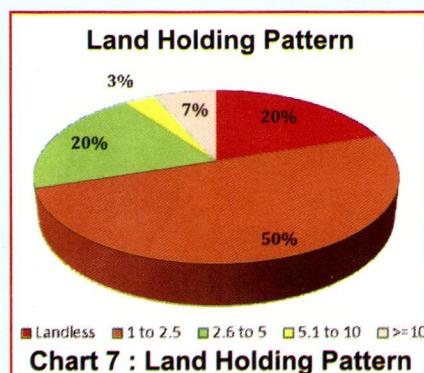
Chart 4 : Educational profile



As chart no. 4 shows most of the respondents were educated with only 3 % illiterate. The highest chunk of respondents had high school education and a good percentage (14%) had studied up to graduation level. This positive educational scenario also must have played some part in the overall success of the project, though it was beyond the scope of this study to analyse that.

Farming is still main occupation of the residents as shown in the chart no. 5. The land holding pattern in the village reveals

average land holding in line with the state average as can be seen in the chart no. 6. However, the village seems to have relatively bit high percentage of landless (20%). High number of landless also means that the greater persons not having their own and secured source of water. These landless must be having greater stake in establishment of common water source.



Another major drive for the common drinking water source and closed sanitation can be seen in the spatial distribution of the habitat and residents of *Renavadi* village. Every village has certain spatial pattern that tends to affect the behaviour of the people. In the case of *Renavadi*, almost similar percentage of people resides in the main village and hamlets. This also means the project had to cover greater geographical area to

deliver water to households residing in both main village and surrounding hamlets.

Project Process

The design of *ApalePani* Phase II project not only provides for creation of physical structures of drinking water supply but also include component of achieving sustainability of the system through community participation. Obviously, the process through which the results achieved is as much important as the assets created through it. Therefore this section throw light on the whole process of the project right from the pre project period and analyse its quality.

Pre project scenario and the rationale

Renavadi village has little very little or almost no experience of the collective work prior to the project. However, there was unity among the villagers as the village was more or less homogenous. Water was the common issue faced by one and all, rich and poor, landless to landholders. Surprisingly, there was no scarcity of water around the village but it was not potable. Men and women recall how they had to fetch water from the distance as all the wells in the main village and some surrounding hamlets had high arsenic content. Bore wells were the main source of drinking water as the water table had gone down considerably. Most of these bore wells also used to get exhausted by end of the winter leaving villagers in precarious condition during the summer.

There were some efforts to address the issue in the past too. Those initiatives did not materialise as the whole village community was not involved in it. Villagers did test water through district water testing facility of many existing villages and the reports deem the water not potable.

In 2007, a new panel got elected in the Gram Panchayat election. The new Surpanch Bhimsen Yeole was a man with enthusiasm and initiative to address this most pressing of the village. At this juncture, SO came in contact with the village.

Project Implementation

Project initiation through Gram Sabha:

The project idea mooted through women Gram Sabha first, followed by general one.



Photo 1 : Welcome Board at Renavadi

Elaborate information regarding the project, its eligibility criteria, norms to be followed were shared through these initial village level meetings.

Formation of Village level institutions:

In general *Gram Sabha* attended by both men and women, a Village Water Supply and Sanitation Committee (VWSSC) and Social Audit Committee were to be set up. Now VWSSC was to look after the whole implementation with the help of SO and TSO. The VWSSC became the sub committee of GP through *Gram Sabha* resolution and received the legal sanctity to implement the project.

Water Budgeting

Participatory Rural Appraisal (PRA) was conducted by the SO to collect relevant and key information about the village and its hamlets. Thereafter a detailed survey was undertaken to collect baseline data on the main village as well as hamlets such as *Dhagewadi, Dattawadi, Agastwadi, Zinjalwadi, More vasti, Derevast*i and *Bhorvast*i. This survey was helpful in water budgeting of the village for next 15 years.

Formulation of project protocol

Help of district geological survey unit was taken to identify proper source of water. Based on PRA, baseline survey and the report of district geological survey, a detailed project proposal was prepared and put up before *Gram Sabha* for approval. *Gram Sabha* also agreed to collect and pay 10% of project cost as local contribution. With resolution of *Gram Sabha* for abiding to project norms collectively the work on the project began.

Social mobilisation and capacity building

After approval of the proposal, District Monitoring Unit (DMU) released Rs. 40,000 for entry point activities that mainly intended towards raising awareness, mobilising the community and capacity building of village level organisations. SO organised an exposure visit of all local opinion makers, committee members and representatives from different segments of the village community to a place, where drinking water supply project was implemented successfully with people's active participation. This visit inspired the villagers to take up the project norms in more earnest way. Painting of village walls with messages raising health, sanitation and hygiene awareness as well as motivational quotes created right atmosphere community action. Training of VWSSC and GP members further strengthened the implementation unit at the village level. The trainings sensitise the VWSSC members about the quality of water and sanitation, as well as equip them with soft skills of social mobilisation.



Photo 2 : Awareness generation through wall writings

Problems faced and strategies adopted

It was not smooth journey from beginning to end for the implementers. It was only due to dynamic initiative of the group of village leaders and NGO persons and the strategies they adopted, the issues that impaired the implementation were resolved. The table below lists the main issues that came up during implementation and the commensurate strategies adopted to overcome them.

Sr.	Problems Foced	Strategies adopted
1.	Though Consent was obtained through Gram Sabha for local Contribution. many were hesitant to pay their share. Even the 10% of the project cost was heavy in many cases.	A principle of 'pay according to ability' was adopted. This meant those who had greater income have to pay more to compensate for those who paid less. However, a fixed minimum contribution which was affordable to the poorest was taken from all.
2.	The condition to construct latrine was not acceptable to all.	Apart from awareness generation, the women in the houses were motivated to persuade their men folk to accept the condition as they suffer the most in the absence of water and sanitation facilities.
3.	The people were reluctant to pay water charges as they were perceived high compared to the past.	Transparency was maintained about all the expenses on the operation and maintenance. It made clear to the villagers that payment of water charges was necessary for proper functioning of the system.

Sr.	Problems Foced	Strategies adopted
4.	Local rivalries mistrust and petty opposition	Conscious effort was made to involve those who were opposing the project due to petty rivalries.
		Total transparency of all accounts was maintained through display board during the implementation Peroid to avoid suspicion.
		Planning was done collectively and execution of work was undertaken by rotating team members.
		Good quality of work was maintained through effective and enabling monitoring.
5.	Behavioural change was slow and many people were not prepared to accept use of closed door latrines.	Vibrant awareness generation campaign was undertaken to convince as many villagers as possible about usefulness of the scheme in terms of health improvement.

Table 1: Problems Strategy Matrix

Community participation and local contribution

The VWSSC of *Renavadi* as a sub committee of Gram Panchayat was entrusted with the responsibility of planning, monitoring, implementation as well as operation and maintenance of the Water Supply Scheme. It ensured active participation of the villagers. It carried out the implementation process maintaining utmost transparency, which enabled it to overcome initial doubts, inhibitions and opposition and obtain optimum participation of the community during project implementation and even after it. One of the verifiable indicator of the participation can be amount of local contribution collected during the initiation of the project. A minimum fixed amount of Rs. 200 was collected from each household. Since principle of 'pay according to ability' was adopted while collection of community contribution, some people pay more proportionate to their income and number of persons within the household. Within the sample households, maximum amount Rs. 500 was also paid by some as shown in the table below.

Local contribution paid by sample households (Rs.)	Minimum	Maximum	Average	Total
	200	500	257	7700

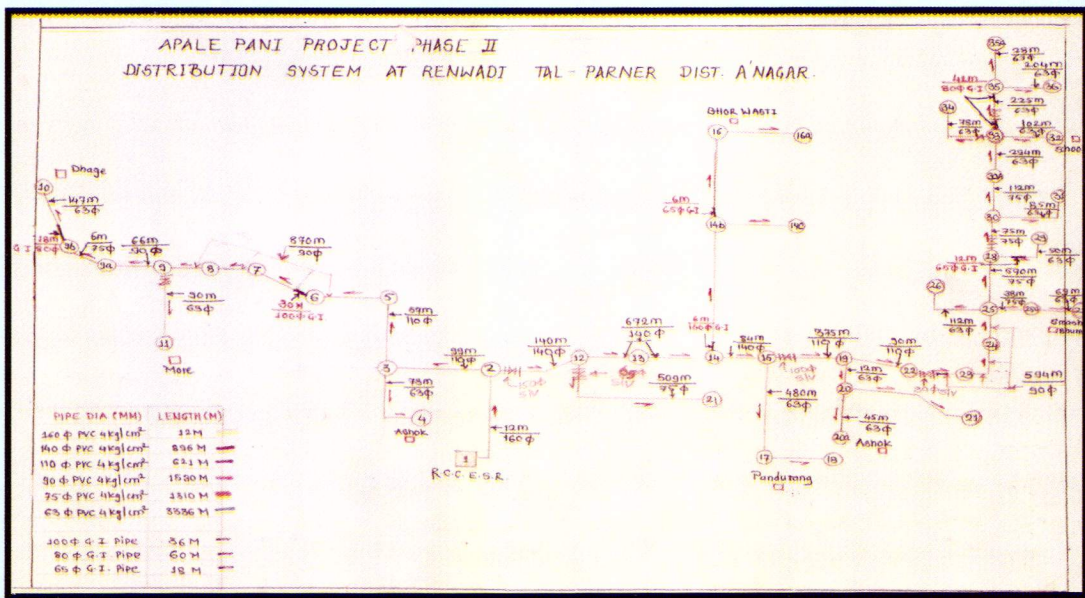
Table 2 : Local Contribution paid by Sample Households

During talks with the VWSSC it was revealed that the total local contribution paid in cash by the whole village was 2 lakh 94 thousand. This means some households must

have contributed even more than the maximum amount reported during the sample survey. This suggests that the participation of the community was remarkable in the implementation and through this cash contribution the good stake of the community got built in the operation of the village drinking water system.

Area and households covered

The drinking water system not only covered the main village but also the hamlets and Vastis (mini hamlets). Apart from whole main village, it covered hamlets such as Dhagewadi, Dattawadi, Agastwadi, Zinjawadi and vasti or mini hamlets such as More vasti, Derevasti and Bhorvasti. This can be seen from the drawn map of pipeline distribution given below. Out of total 166 households, 135 households who did not



Map 2 : Pipe Distribution Map

have their own source of water were selected as beneficiaries through Gram Sabha. Those who were not included had their own perennial source and did not take connection to avoid recurring water charges.

Water Source and Structures

With the help of geological survey perennially sustainable source of water was identified and bore well was constructed. There are no other wells within 500 meters



Photo 3 : Water Tank built through the project

of bore well and *Gram Sabha* had passed resolution banning exploration of any new well near this bore well without prior permission. The water was tested at the source before constructing pump house and the water tank. A water tank was built near bore well, which has storage capacity of 10000 litres. Simultaneously a pump house was built to lift water from bore well to water tank. From this main water tank the water is distributed to whole village and hamlets through well laid pipeline along the road. In order to provide perennial drinking water supply to school, a connection was given to it and water tank is built within the school premises. So far no water charges have been taken from the school as villagers decided to bear it.



Photo 5 : Water Tank built within school premises



Photo 5 : Pump house near bore well

Impacts

The project had both direct and indirect impacts. During the FGD conducted in the course of documentation study, the people were eager to voice the changes in their lives after implementation of the project. Notably, the same were confirmed through the household sample survey in more specific manner. The major areas in which project had pronounced impacts include drinking water availability, drudgery, health, hygiene, cleanliness and productive waste water use.

Water availability at the doorstep

Ensuring adequate water availability round the year to all the households was the main objective of this project. As shown in table no. 3, the supply through water connection remains for minimum two hours a day. While maximum hours reported supply was found to be for 5 hours and which is closed to average reported supply per day of 4 hours 37 minutes. This much daily water supply was found to be quite adequate by villagers. Notably, the survey was conducted in March this year when all western Maharashtra was facing acute water scarcity with receding water table.



Photo 6 : Tap of Parubai Bhor (Renawadi)

Minimum (Hours)	Maximum (Hours)	Average (Hours)
2	5	4.37

Table 3 : Water supply during the day

When respondents were asked about comparative water availability between pre and post project period, the response was telling. During rainy season all the households in the both periods had adequate water for drinking, washing, bathing, house cleaning and for livestock. However, only in the post project period, all the households reportedly have enough water during all the seasons including summer for above mentioned purposes. Obviously it was huge and direct change for the villagers and key benefit of the project. Apart from individual households, the school now also has its own tap and students do not have to rush home for water.



Photo 7 : Water being Collected In front of house with Kitchen Garden by SujataYeole



Photo 8 : Students using the Tap within Renavadi school premises

All year round water supply also means greater sustainability. Irregular water supply causes pollution in distributional pipes due to rusting and back-syphoning of water due to low pressure and insufficient water flow.

Drudgery reduction

Apart from health effects, inadequate water supply at the door step also means increased hardship on women and children, compelling them to spend more time and energy in collecting water. Adequate, around the year water supply after the project has considerably reduced the distance from the water source and time that gone into collection of water.

During household survey, it was revealed that average distance from which people, particularly women had to fetch was reduced considerably. though average distance from the water source in pre project year was 0.4 km, in some cases it was much more, particularly in summer season.

Average distance from water source	
Pre Project (Km)	Post Project (Km)
0.4	0

Table 4 : Distance from water source



Photo10: Tap within the house of VaishaliShinde



Photo10: Water tap at the doorstep of Yeshodhabai

With reduced distance from water source, the hours spent daily by women on the collection of water also reduced as shown in the chart no 8. The average hours spent by women in the process reduced by -84.24 per cent with 1 hour 29 minutes saved daily compared to pre project situation indicating remarkable drudgery reduction for women in the village.

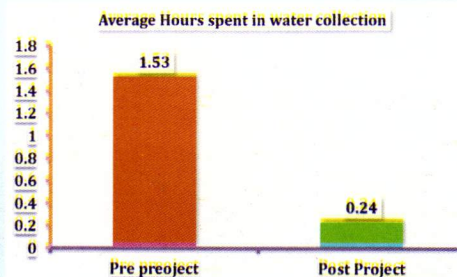


Chart 8 : Average Hours spent by women in water collection



Photo11: Tap within the house of Savitrabai Arjun Navgire

Sanitation and waste water use

ApalePani Phase II project also had complementary component of sanitation, which was necessary to achieve health objective. It include construction of latrines and bathrooms and safe drainage water channels.

Indicators	Before	After	% Change
Number of latrines	45	175	289%
Percentage of total HH with covered drainage	11%	23%	109%
Percentage of HH having kitchen gardens	0%	77%	-
Percentage of HH having Closed Bathroom	3%	100%	3233%

Table 5 : Change in sanitation facilities

Table no 5 indicate that the percentage of total households with sanitation facilities increased dramatically after the project. The village became free of open defecation, which was widespread before the project. Apart from each households common latrines were constructed. Today the number of latrines constructed in the village outnumbers total household number. More than construction use of latrines is many times issue in such schemes. However, due to water connections to latrines and increased



Photo12: Common Latrines within School

awareness these facilities are being used and are functional.

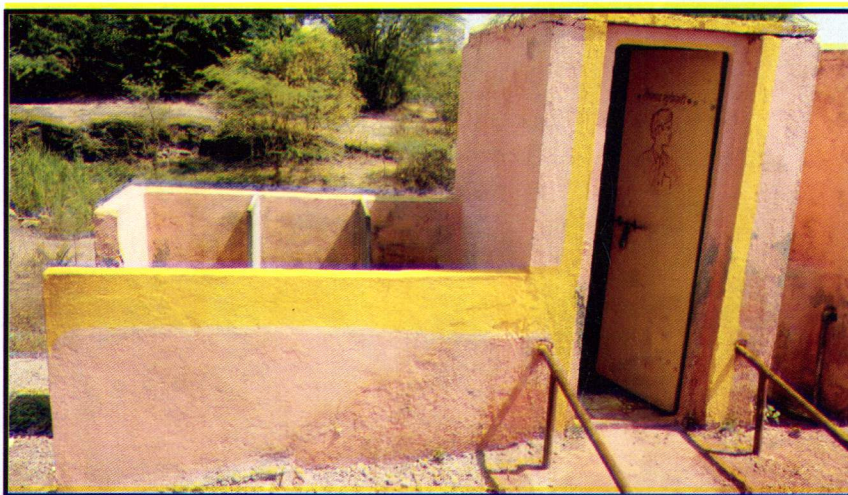


Photo 13: Toilets within school premises

Drainage water management is key issue in village sanitation. The percentage of households with covered drainage system increased after the project by 109 per cent. This has resulted in improved cleanliness, health and hygiene.



Photo 14 : Covered drainage lines

Those households who have not covered drain channels also using the waste water. Around 77% of total households have raised kitchen gardens using the drainage water flowing out of their houses. It is not only recycling of the water but also source

increased nutritional food in their diet. Kitchen gardens have even become supplementary source of income for some houses.



Photo 17 : Kitchen Garden of Bhamabai Baban Sonavane



Photo 17 : Kitchen Garden of Vaishali Bansi Shinde



Photo 17 : Kitchen Garden of Anandabai Natha Yeole

Alternate Energy: Biogas construction

Post project period also saw proliferation of biogas units in the village with good number of functional toilets offered an opportunity to save fuel wood cost to people. Since bio gas provides clean energy for cooking and also organic fertiliser for the fields, the idea is catching up in *Renavadi*.



Photo 18 : Bio Gas Unit of Deubai Balasaheb Dere



Photo 19 : Bio gas unit in Renavadi

Cleanliness and hygiene

A campaign for cleanliness and hygiene was piloted in the village along with awareness for sanitation through the project. It changed the very face of the village. Inner pavement roads were constructed by the GP using different schemes. Dust bins are provided at the street corners with boards asking to use it throw garbage.



Photo 20 : Clean internal roads with dust bins in Renavadi



Photo 21 : Clean well constructed road in Renavadi

Changed Health Scenario

Health objective was central to the project and it was to be achieved through provision of safe and adequate supply of drinking water and improved sanitation within village. Drinking water, in adequate quantity and safe quality, is a basic requirement for life. Unsafe and poor quality water adversely affects health status of people. It leads in many contagious diseases including diarrhoea, fluorosis, cholera, hepatitis A, trachoma and other water-borne diseases. These ailments hamper human energy and productivity. It especially puts poor in precarious position as they are engaged in manual work and lives on daily earning. It also means additional spending on health. Huge change in the health scenario between pre and post project period was unveiled through sample household survey. Reportedly, close to 81 % of the total population suffered from different ailments related to unsafe water consumption during the pre project period annually. With safe supply of drinking water and improved sanitation, the percentage of the total population reportedly affected by these diseases came down to 31 %.

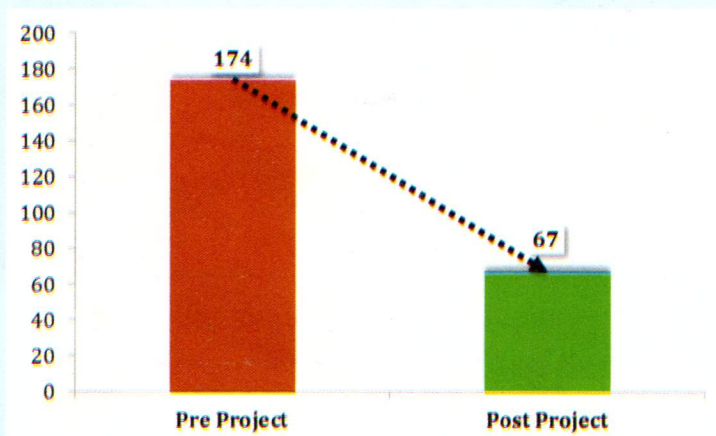


Chart 9 : Number of persons reported water borne diseases

As the Table no. 6 shows the persons affected dysentery, diarrhoea in the post project period reduced by 47 per cent. Highest change of - 87 % was found in the case of intestinal worms indicating improved sanitary and hygienic conditions.

Diseases	% Change
Dysentery / diarrhoea	-47.0
Jaundice	-65.5
Intestinal worms	-87.9
Other diseases	-60.9
All	-61.5

Table 6 : Percentage Change in Peescum appetite in ailments

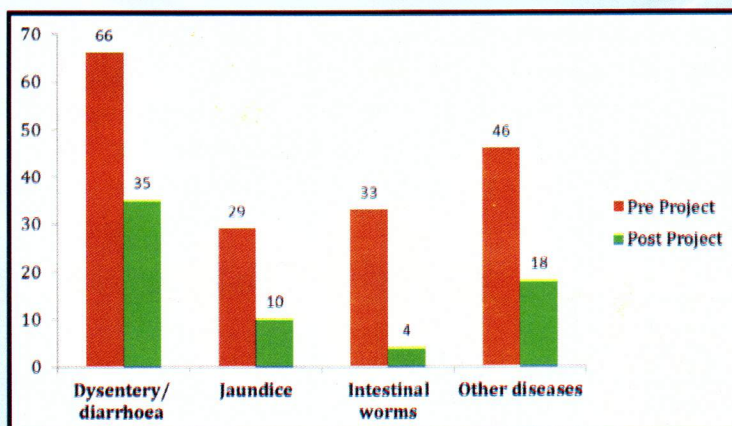


Chart 10: Comparative view of number of persons affected by ailments annually
 With reduced incidence of ailments, the frequency to visit doctor also decreased in the post project period. The number of times persons visiting doctor after getting affected by intestinal worms reduced 46.77 %. Overall frequency of visiting doctors also decreased by 35 % as shown in the Chart no 11 and Table no. 7.

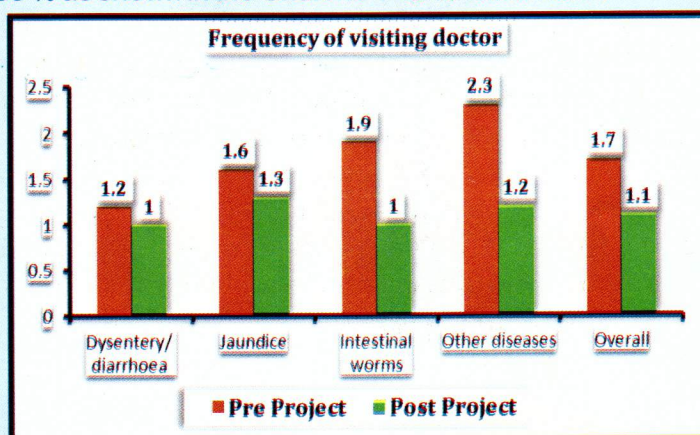


Chart 11 : Frequency of per person visits to doctor

Illness	% Change
Dysentery / diarrhoea	-18.5
Jaundice	-22.9
Intestinal worms	-46.8
Other diseases	-47.8
Overall	-35.4

Table 7 : Percentage change in frequency of visits to doctor

Obviously, the average spending on medicines and doctors by the villagers also witnessed downside in the post project period drastically compared to the period

before the project. As the Table no. 8 shows spending on the medicines and doctor fees on all the water related diseases reduced considerably. Reduction in spending was most pronounced in case of worm related ailments. Overall average spending per person on all ailments during the pre project period was about Rs. 195, which came down around to Rs. 102. Considering the current inflation rate, the decline in health spending looks even more impressive.

Illness	Pre Project (Rs.)	Post Project (Rs.)	% Change
Dysentery/ diarrhoea	147.73	93.48	-36.72
Jaundice	179.31	107.14	-40.25
Intestinal worms	219.70	83.33	-62.07
Other diseases	254.35	119.23	-53.12
Overall	194.83	102.17	-47.56

Table 8 : Average Spending on medicines and doctors

Perceived benefits

During the household survey open question was asked to respondents to list out key benefits of the project. The foremost quoted benefit as can be seen in the Chart no. 12 was drudgery reduction of women. It was followed by improved socio economic status and improved health. Closely related quoted benefit to improved health status was reduced spending on health. Clean and adequate water were also important benefits of the project perceived by the respondents. Greater cleanliness and water awareness, which is reflected in the health scenario also quoted as benefits by the villagers. Some also mentioned realisation of team and collective work as a benefit, indicating that the whole process bring to fore power of collective work.

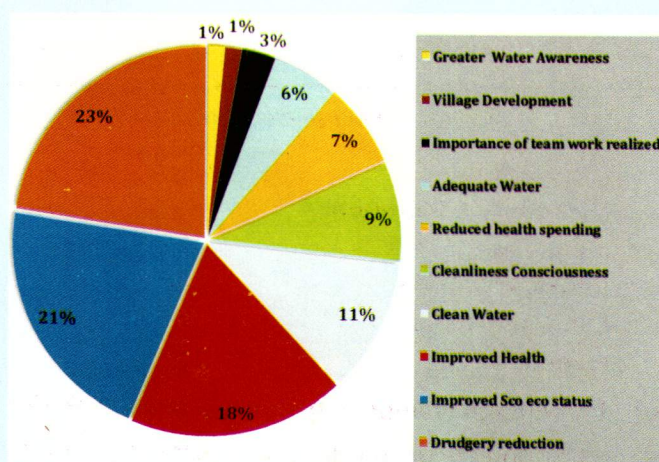


Chart 12 : Benefits of the project perceived by the community

Sustainability

One of the major issue in drinking water and sanitation project is its sustainability in terms functioning and effectiveness. Many such schemes implemented in rural areas have failed to sustain for longer duration. There are four different dimensions of sustainability and let us see how *Renavadi* drinking water project has addressed those.

Source Sustainability

Ensuring availability of safe drinking water in adequate quantity throughout the year is must for having this issue of sustainability. In the *Renavadi* project, as mentioned earlier the source has been identified that provides adequate water even during the lean season of summer. Further, care has been taken that no excavation takes place near the source to avoid any fluctuations in the water availability. The water is tested at source routinely and the GP is overseeing the protection of the source.

System Sustainability

The responsibility of operation and maintenance of drinking water supply schemes is entrusted to *Renavadi* Gram Panchayat now. It has appointed a pump operator and other personnel for the operation of the systems from the village itself. Water charges of Rs. 700 per year are fixed per household and collected within stipulated time. Notably, there are no dues pending with villagers and the GP has sufficient balance in reserve. A proper protocol of water use and maintenance at household level has been devised and properly followed. Well chalked out system of operation and maintenance of water structures (water tank, pump house), pipe line and taps is in place and functional. Leak detection methods are used and leakages are prevented at both village and household levels.

Financial Sustainability

Unlike earlier cases, the GP is not financially dependent on upper bodies for O & M costs. Water tax levied by the GP is sufficient to cover operational costs and occasional maintenance if required. In many failed projects the operational cost recovery of 50% is expected from the local governments. In the case of *Renavadi*, 100% cost being recovered through water taxes. During the current year, GP has collected Rs. 1 lakh 10 thousand 750 as water tax. The total expenses in the year on operation of the system was about Rs. 60 thousand and 201. The GP is keeping the accounts of income and expenses of the system separately. Now it still has reserve of Rs. 1 lakh 40 thousand 572 in its account meant for drinking water system operations. When people were asked about affordability of the water tax, not a single respondent reported in negative. According to *Sarpanch*, this wide acceptability of water charges was result of consensual process in which amount was fixed and the quality of service people receive against it.

Social and environmental Sustainability

Participatory water budgeting was undertaken during the initiation of the project in *Renavadi* and water requirement of next fifteen years has been calculated. The GP is actively educating the community regarding water savings, waste water recycling and use of bio energy. It is maintaining transparency in its operation as any doubt can affect collection of water charges. Involvement of the community in decision making through properly held Gram Sabha has further raised awareness regarding long term concerns of efficient water and waste water use. This has resulted in

proliferation of kitchen gardens, biogas plants in the village. The GP has back up plans for emergency situations. The wells with potable water source have been identified and the owners of those wells have been informed that in crisis situation GP will have right to reserve those for providing drinking water to the citizens.

Learning and implications

Following learning of the project revealed through FGD conducted by the documentation team.

1. Participation of the community right from the beginning can not only ensures quality of the work but also long term sustainability.
2. Village leadership need to be dynamic, accommodative and accountable for the execution and success of the drinking water and sanitation programme.
3. GP committee need to be trained, motivated and sensitised regarding water and sanitation issues.
4. Community can realise the strength of collective work and worth of common assets if the process of implementation is essentially participatory, inclusive and transparent.
5. If water supply is adequate and service delivery is responsive, the collection of water charges poses no issues.
6. GP is appropriate body to look after O & M of the drinking water supply systems due to its powers, credibility and leverage.

Replication

The project design of *ApalePani* Phase II is well structured to have wider replication. In *Renavadi*, it has been followed earnestly. Given the current precarious drinking water situation in Maharashtra, the GPs in the state will be eager to follow the model created by *Renavadi*. Some of the innovations that mark the *Renavadi* model that can have wider replication are:

A team of enthusiastic members of GP remains active even after project implementation ensuring sustainability.

Apart from water and sanitation, waste water recycling need to be stressed for cleanliness of the village and its appearance. Clean village can create good self image among the residents and push them to respond to hygienic behaviour.