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Uttarakhand Rural Drinking Water Supply & Sanitation Project

Swajal Samachar



Project Management Unit

SWAJAL PROJECT

Department of Drinking Water, Uttarakhand

Uttarakhand Rural Water Supply & Sanitation Project



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Content

S.No	Subject	Page No.
1.	From the Editors Desk (Managing The Water Resources is the Key for Future Generations)	2
2.	Role of Change Management in Indian Water Sector	3-4
3.	Draft Guidelines: for devolution of Single Village Water Supply Schemes to Panchayati Raj Institutions for Operation & Maintenance	5-9
4.	Impact on Drop of Water	10-11
5.	Stepping towards transparency Sector Information System (SIS)	12
6.	Exposure Visit of officials and PRI representatives of Uttarakhand to Jalanidhi Project Kerala	13-14

EDITORIAL

MANAGING THE WATER RESOURCES IS THE KEY FOR FUTURE GENERATIONS

It's with great pleasure that the third issue of Swajal Samachar is being brought to you. In fact, the kind of response that we are getting shows that the communities and the functionaries at grassroots level really find the magazine interesting and informative thus it has been decided to dedicate this third issue to the extension workers of WATSAN sector. We are opening a web edition also so that the policy makers also find convenient to peep into the Swajal Samachar to get acquainted with the feedback coming directly from the communities. It will also help to establish effective communication with the uppermost tier of the society.

Successful management of the biggest religious & cultural Kumkbh Mela (Four month) by our small state shows the latent potential and institutional capacities of people & machineries of the state. We hope that the rapport with in the state among the people and the state agencies and also with outside world shall be replicated in other developmental endeavors also.

In this continuation it is noteworthy that Uttarakhand is the pioneer State which has realized the role & potential of our people and community based organizations in WATSAN sector. The ever-increasing demand for tanker & mule based water supply in summer season and the widening of gap in demand and supply were treated as an indicator to the need of transformation in management and service delivery pattern of the drinking water department. Thus the Sector Program was initiated which directed us to attend the call for demand driven collective action to tackle the issue of access to safe drinking water and its equitable sharing. The aim is to develop better understanding at all levels to manage water resources in an integrated manner.

Cooperation is the key to proper management of water resources, particularly when watercourses cross the administrative/ political boundaries even at basic grassroots level i.e. at village or hamlet level and it becomes a point of great concern to all the stakeholders. Access to clean, safe water is essential to the health and wellbeing of people. Inaction on water issues is not an option as access to clean water and sanitation is fundamental to every aspect of life from health to survival and dignity. Water, which is a limited natural resource that can unite or divide communities, is also essential to ensuring basic human necessities. We can be instrumental to create required harmony in our hamlets/ villages by creating the environment for equitable sharing and management of water resources for a prosperous state.

We look forward to continuing our work with communities, local self government, departments, the private sector and international development partners, including the World Bank to increase resources for Water, sanitation and hygiene and also bring to national scale appropriate technologies for excreta management, rainwater harvesting, household water treatment and safe storage.

Your opinion and suggestions are always welcome because we believe that water is for all thus we all can, should and need to think about conservation and judicious use of the most important natural resource for ourselves and the future generations.

Editorial Board

Role of Change Management in Indian Water Sector

Change management is a structured approach to change in individuals, teams, organizations and the societies that enables the transition from a current state to a desired background.

For translating the principles and philosophy of any new development programme into action, there is a need for both individual and organizational change. It is high time that the public systems should have started learning to manage. Change internally in functioning and work process and externally in its relations with different stakeholders. Issues of attitudinal and behavioral change amongst the water sector professionals in general and the engineers in particular need priority action. Proactive action, empathetic listening, social engineering and partnership based community management are seen as the new drivers of change. This requires paradigm shifts as well as shifts in mindsets of all the stakeholders so that an institutional system is put in place for demand driven and community managed drinking water delivery systems with focus on quality equity and gender concerns.



Inspection of Water Supply Scheme

❖ Change is an inevitable and inescapable fact of life. It is the only permanent thing in this world. No organization exists in isolation; rather, every organization exists in an open environment upon which it ought to depend for the resources necessary to sustain it. In this competitive world the organization must, in return for the resources it uses, provide goods and services to the environment more efficiently than its competitors. In other words, it must maintain a viable relationship with a changing environment. Modern organizations are learning to cope with changes. They are beginning to realize the importance of managing change in a planned way. Generally speaking, management of change involves a series of steps.

- ❖ Reorganizing the forces demanding change
- ❖ Diagnosis Problem
- ❖ Plan the change
- ❖ Implementing the change
- ❖ Following Up

Serving the urban as well as rural population in India with clean water and sanitation services remains a vital public health task. Often the water sector is seen as free good or social service and not as an economically viable endeavor. Tariff levels are low and do not recover cost. Subsidies aimed at serving the poor become counter productive by making it unattractive for utilities to serve that segment of population. Despite the efforts of governments and other agencies, a high percentage of population in India especially the poor still lack reliable and clean water supply and sanitation services.

Sector Challenges

A number of factors are responsible for the poor level of water services in this sector. Water is seen as a free or social good and not as an economic good. Consequently, no attention was paid to designing appropriate tariff structure on a cost recovery basis. Subsidies were inappropriately targeted often benefitting the well-off sections. In short, the following are some of the key challenges faced by the Indian water sector.

- Institutional complexity
- Low tariff and cost recovery
- Inappropriately targeted subsidies
- High (unknown) unaccounted for water both commercial and physical losses

- Lack of professional and managerial capability
- Lack of effective MIS

Need for Change Management

It is not possible to make changes in the system without changing the outlook of the engineers/managers responsible for the present system. The Indian water sector is caught in a low level equilibrium trap resulting in the poor sustainability of the system. The water sector's efficiency depends primarily on capital investments, technical and engineering capability and human resource management and capacity building. The low level equilibrium trap can be broken by adopting change management options that can bring large scale organizational, financial and institutional reforms in the sector.

Rural Sector Challenges in Uttarakhand

Present Rural Water Supply and Sanitation service delivery does not adequately serve the requirement of user communities. Water scarcity is another issue faced by state. Data from existing water supply schemes indicate that nearly 30 percent of the schemes suffer from a decrease in the availability of water, especially during the summer months, because of depletion of water sources. This also causes some of the villagers to spend considerable amount of time collecting water for domestic use, averaging one to three hours per day; even more time is spent in hilly locations. The problem is aggravated by water supply systems which have outlived their design life, and inadequate O&M. Water-related diseases are a major health problem for the rural population, particularly for infants and children. Planning of RWSS services also takes place without due attention to resource availability or quality, and the schemes are rarely financially viable. The end result is a government-dominated and target-driven service that has become unsustainable.



Community disclosure through Community Meeting

SWAp

Now government of Uttarakhand has adopted a demand-driven community participatory approach instead of earlier supply-driven approach. Using change management, the state government has adopted a sector wide approach (SWAp) and adopted a consistent policy for RWSS service delivery state wide. Government of Uttarakhand has also established the State Water and Sanitation Mission (SWSM) and District-Level Water and Sanitation Missions (DWSMs) and these are responsible for implementing the policy guidelines and reform principles for the RWSS sector. World Bank funded, Sector program is based on the principles of Sector Wide Approach (SWAp). The main objective of the project is to scale up the reforms in the Rural Water Supply and Sanitation Sector. This is a pioneer project of India in which SWAp principle has been adopted. Now the project has completed its mid term and the results are quite encouraging. I am absolutely sure that the demonstrated success of reforms in Uttarakhand would contribute to replication of such model in other states.

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Draft Guidelines: for devolution of Single Village Water Supply schemes to Panchayati Raj Institutions for Operation & Maintenance

The description given below is a draft note for discussion on the procedure of transferring the single village schemes (that are presently under the execution of Uttarakhand Peyjal Nigam or Uttarakhand Jal Sansthan) to the Gram Panchayats, suggestions from all the stakeholders are welcome.

Despite of the huge investments during the last decades for the creation of infrastructure for Rural Drinking Water Supply network in the state the level of service delivery is far from satisfactory and the O&M expenses are mounting every year thus by the learning's from successful community led water supply schemes it has been realized that the Society can govern itself effectively only when every responsible individual plays his role in the management of its affairs and the agencies responsible for the O&M intend to empower the users on social, technical and financial aspects of the water supply schemes. The more an individual participates in the administration and management of public services, the greater is the democratic character of the society. Such a mode of association provides its members maximum opportunity for community participation leading to effective service delivery.

The 73rd amendment of the constitution of India came into force in 1993 and ensured conferment of powers and responsibilities to Panchayati Raj Institutions (PRI's) for local self-governance. The State of Uttarakhand, through Government Order No. 622/पं.ग्रा.अ.से.अनु./92(25)/2003 Dated 29 October, 2003 of (Panchayati Raj Department, Government Order No 2121/उत्तीस/04-2/2004 दिनांक 17 अगस्त, 2004 and Government Order No. 308/86 (16)/2005 दिनांक 19 मई, 2005 Drinking Water Supply Department has defined fund function and functionaries to Gram Panchayats for construction repair and maintenance of hand pumps and supply of water through domestic use is a function to be performed by the Panchayats in their area of jurisdiction.

Operation & Maintenance of Water Supply Schemes

In an engineering sense, operation refers to hourly and daily operations of the components of a system such as plant, machinery, equipment, control valves etc. which is done by a skilled worker. This is routine work. The term maintenance is defined as the act of keeping the plant, equipment, structures and other related facilities in optimum working order. Maintenance includes preventive maintenance or corrective maintenance, mechanical adjustment, repairs and planned maintenance. It has been established through success of many community managed water supply schemes that generally the users in the urge of getting satisfactory level of services have proven in many cases that they opt to take up the responsibility of operation & maintenance if they are provide with a basis knowledge of technicality associated with day to day functioning and repairing of the water supply systems. Which they keep on refining through the trial & error method and somehow attain a workable perfection which leads to sustainability of the community managed water supply systems.

Strategy for O&M of Rural Water Supply in Uttarakhand

By strengthening the three tier Panchayati Raj Institutions in the state the Government has decided to transfer the responsibility of operation & maintenance activities of drinking water supply schemes to the PRIs. 10% of National Rural Drinking Water Program (NRDWP) funds are required to be used for operation & maintenance activities though PRIs who will be delegated the responsibility of supply of drinking water in the rural areas. Apart from this a substantial allocation under the Finance Commission recommendations could be used for the Operation & Maintenance of Rural Water Supply Schemes. It has been realized that exhaustive, practical and clear cut guidelines are required to be given to the field functionaries of Operation & Maintenance Agencies (UJN & UJS) as well as for the PRIs (and user committees) to ensure clarity of roles and functions in the management of the schemes actually transferred to the PRIs.



Procedure for handing over of the schemes to to PRIs

The entire scheme from Water Source or intake to each and every Stand Post shall be transferred to concerned Gram Panchayats, which meet the prescribed criteria delineated below, for complete operation & maintenance. The schemes, which do not fulfill the criteria to some extent, should be rectified so as to bring them to the standards to fit the criteria.

Steps to follows

The Executive Engineer after identification of such schemes shall request the concerned Pradhan of the Panchayat for taking over the O&M of the scheme indicating complete technical details, different components and their magnitude including merits of the scheme.

A meeting with the Gram Panchayat/ UWSSC chaired by Gram Pradhan and all members of Panchayat should be convened which should also be attended by the E.E., A.E. & concerned J. Es and attempts shall be made to make an opinion of transfer of the schemes.

These draft guidelines are applicable to those schemes, the area of service which falls within single Panchayat only. Guidelines for the transfer of multi Panchayats scheme shall be drafted separately after adjudging the fitness and out come of these guidelines and experience gained out of it.

The Schemes to be transferred must fulfill the following criteria:-

Selection of Schemes for transferring to Gram Panchayat.

- ❖ A committee (as per the GO 308/86(16)/2005 dated 19th, May 2005) has been formed and duly trained on its roles & responsibilities and other aspects (technical, social & financial) of Operational & Maintenance of the scheme in the particular villages
- ❖ The area of service should fall within the same Gram Panchayat; the source, Water Treatment Plan (WTP) and gravity main can however be outside the jurisdiction of Panchayat.
- ❖ The entire scheme should be in a satisfactory working condition without any history of frequent break downs & crisis that require intensive technical supervision and manipulation.
- ❖ The scheme should have proper head works viz diversion weir or properly protected spring source.
- ❖ The Water Treatment Plants (WTPs) wherever existing should be of adequate capacity and in satisfactory working condition.
- ❖ The storage tanks should be of proper required capacity, non leaking and in satisfactory condition.
- ❖ The piping system including distribution should be in a healthy functional condition and there should be no leakage in the system. All the Stand Posts provided in the system should be working satisfactorily and must discharge the required quantity of water.
- ❖ The pumping machinery and its accessories should be in good health and working condition.
- ❖ Initially handover of only simple gravity flow based schemes should be considered and lift schemes should be considered only where confidence level regarding the capacity of Gram Panchayats to run the schemes is quite high.
- ❖ Walk of Confidence by O&M agency representatives and PRI representatives
- ❖ Before handing over the systems a walk through including the members of the Gram Panchayat, user group(organized in form of User Water Supply & sanitation Committee) and officials of Rural Development Department should be made. The proceedings of the walk through, including the comments of all the participants be recorded and this record shall be maintained in the office of A.E. and E.E./Gram Panchayat.



- ❖ An inventory of all the components indicating their state of working should be made and jointly signed by the representative of all involved in the walk (the Gram Panchayat and the departments) and a copy of the same should be handed over to the Gram Panchayat and one copy should be retained in the office of the A.E. as well as E.E.

Transfer of Assets

- ❖ A key plan and details of the scheme indicating the functional health of each component should be prepared. The details of each component such as the type of head work, the size and length of each pipe, type, make and capacity of pumping machinery and its allied accessories, type, size and location of control valves, capacity & location of WTPs and storage tanks and number & location of hydrant posts private as well as public, which should be jointly signed by the PRIs representative and the officers of concerned department and should be kept in the records of Gram Panchayat as well as in the department.
- ❖ The manpower already deployed by the department on the operation & maintenance of the schemes shall be placed at the disposal of the Gram Panchayat (G.P.), if the Gram Panchayat opts for the deployment of departmental workers. Otherwise the Gram Panchayat (G.P) shall be at liberty to employ their own workers as per the necessity. The number of workers skilled as well as unskilled may be decided mutually by the Assistant Engineer of O&M agency and the Pradhan of the Gram Panchayat.
- ❖ The Electric connection of Pump Houses and other installations shall be transferred on the name of G.P.

Support by the Government

a) FINANCIAL:

- ❖ The Panchayat through its UWSSC (bye laws approved by GP) shall be responsible to fix water tariff which cannot be less than the tariff fixed by the Govt. (GO no 2428 उत्तीस / 04-2 (22पे0) 2004 दिनांक 31 मई, 2005 from time to time. The realization of water charges shall be done by G.P. & the entire amount on account of this shall retained by the G.P, which shall be used for development works in the Panchayat.
- ❖ The G.P through its UWSSC bye laws shall be authorized to impose any penalty or compensation on miscreants; the amount so collected shall be retained by the Gram Panchayats and utilized as above.
- ❖ The financial assistance (If requires only in case of ecologically/topographically vulnerable schemes) shall be provided by the through devolution of funds of State Finance Commission and GoI Finance Commission and NRDWP's funds for O & M to the G.P. to meet the O & M expenditure.

b) TECHNICAL:

- ❖ The role of the O & M agency as facilitator in all type of activities, like financial and technical management, operation & maintenance shall continue un-interrupted and unlimited. However, the following main activities are especially specified:
- ❖ Time to time training, awareness or capacity building of the members of UWSSC/ the PRIs or the persons deployed on the transferred schemes shall be provided by the O & M agency. At the outset three month training will be given to persons deployed for O & M of the scheme by O & M agency.
- ❖ All technical reports, estimates designs, drawings etc. shall be prepared by the O & M agency as and when any such work is proposed by the G.P. and the O&M agency is requested to do so.
- ❖ All technical supervisions and time to time guidance on the construction and O & M activities shall be provided by the O & M agency.
- ❖ The technical support in the management of crises shall be provided by the O & M agency.
- ❖ The evaluation studies if proposed at any time by the Govt. shall be duly supported by the O&M agency.



- ❖ The O & M agency shall provide necessary assistance and guidance to maintain the records of the scheme and its operation and maintenance.
- ❖ The O & M agency shall make available the copies of Acts, rules, regulations and latest amendments and instructions to the G.P.
- ❖ No change addition, alteration or modification in the system in any form can be done by the G.P without the approval of competent authority from the O & M Agency.
- ❖ The O & M Agency shall prepare a statement of all private connections and the same shall be handed over to the G.P.
- ❖ A Maintenance team will be constituted at every section headquarter out of the existing staff of the staff withdrawn from the schemes after handing over to PRIs. Maintenance team will function under the guidance and control of concerned J.E. and will look after the major/ special repairs of the schemes transferred to PRIs.

Selection of person for O & M

In those cases where the O&M agency shall not be in a position to transfer the manpower to PRIs or it is mutually decided not to transfer manpower to PRIs alongwith the scheme, the following criteria shall be adopted for the employment of persons by the G.P.

- ❖ The Panchayat would be free to appoint any person belonging to BPL families having good health and sound mind for operating and maintaining the scheme.
- ❖ Only such skilled workers shall be employed who possess the notified educational and technical qualification for each such category.
- ❖ If the technical person from BPL families is not be available other person can be employed. The person employed should not be a close relative of Pradhan/Up Pradhan, which means not his/her spouse and children.
- ❖ The wages can be settled with the A.E. depending upon the volume of work but not exceeding the amount fixed by the Govt. for such employments (on contract basis).
- ❖ The person selected should preferably belong to the same Panchayat, who should be dedicated not likely to move out for other pursuits of life in near future.
- ❖ The number of persons and their technical skills shall be decided in consultation with the A.E. who shall approve the numbers and the wages payable be them, which shall not exceed as fixed by the Govt. from time to time for contractual and part time workers.
- ❖ The Gram Panchayat shall be free to remove persons employed by it if their performance is not found satisfactory.

Duties of the persons appointed for O & M of the Scheme

- ❖ The complete task of operation and maintenance of the scheme will be done by the appointed persons including operation of treatment plant, regulating the flow, opening & closing of valves in distribution system daily with required chlorination of the sector storage tanks to be carried out periodically as required.
- ❖ To check for the status of scouring and then proper close out of wash out valves.
- ❖ To check for leakage through pipes and repair the same.
- ❖ To check for the status of manhole cover over the storage tank and chamber covers
- ❖ To inspect for any possibilities of pollution of the distribution system and storage tanks.
- ❖ To intimate the requirement of bleaching powder and other chemical to G.P. well in advance.
- ❖ To clean and disinfect all the storage tanks periodically preferably once in a quarter.



- ❖ To check for any misuse/pilferage of drinking water by any person and also bring it to the notice of VWSC/ UWSSC & GP.
- ❖ The appointed persons will be required to report on any major disruption of the distribution network to the VWSC/ UWSSC & GP so that the supply of drinking water can be restored at the earliest.

Monitoring by the O&M Agency

- ❖ The engineers of the O&M agency shall inspect the scheme regularly as per norms and issue necessary observation and guidelines.
- ❖ Periodical meeting by the O & M agency officers with the G.P/ UWSSC shall be conducted to resolve any difficulties and the observation of the inspecting engineers shall be attended to. Such meeting should be at-least one in each quarter.
- ❖ The O&M agency shall maintain records of all events and changes in the schemes and shall carry out regular evaluation of the policy of transfer of schemes.

Monitoring and responsibility of the GP

- ❖ Panchayat through its UWSSC's/ UWSSC shall maintain a register of complaints and the action taken on them along with outcome.
- ❖ The Panchayat through its UWSSC's/ UWSSC will maintain a record and duration of break-downs indication the time and duration of break down on the specified format.
- ❖ The users water supply & sanitation committee (UWSSC) shall be formed by the G.P. to oversee the working of staff, which shall report the irregularities, if any to the G.P. for taking action against the defaulters.
- ❖ The Panchayat shall maintain a record of misuse of water by individual or user group and shall take suitable action at their level as per the provisions of UWSSC by laws.
- ❖ The Panchayat shall maintain all records like minutes of meeting register, attendance registers of the workers, their wage bills, payment and all other transactions of any type in the operation and maintenance of scheme.
- ❖ For maintaining the records, the GP/ UWSSC can use one of the educated person deployed for the work on the scheme with some additional remuneration.
- ❖ A site order register of the scheme shall be opened and maintained by the Panchayat/ UWSSC in which remarks of the inspection officer shall be recorded.
- ❖ The procurement of all materials, fittings etc shall be done by the GP/ UWSSC and its fixing or replacement shall be done by the workers employed by the GP/ UWSSC.
- ❖ All chemical shall be procured by the GP/ UWSSC through the concerned Department shall be done by the worker employed on the scheme.
- ❖ The payment to all skilled as well unskilled workers shall be made by the G.P/ UWSSC by using funds generated by the GP/ UWSSC or grants given by the Govt.
- ❖ The payment of energy bills shall be made by the GP/ UWSSC
- ❖ All routine repairs shall be done by the G.P/ UWSSC while special repairs/ replacement shall be done by the maintenance team of concerned department unless otherwise allowed by the A.E. The special repair means any major damage to pipelines, storage tanks, treatment plants, intake and sources of water due to any event, natural or man made.
- ❖ GP/ UWSSC shall ensure a proper quality of water in the system and its regular monitoring shall be done.

Opinion :

Critical comments are welcome from the readers for improvement of draft policy.



Impact on Drop of Water-----

Uttarakhand Rural water supply & sanitation project is working with long term sustainability for drop of water. The works of source conservation & Recharging is a visionary approach for 21 century when drop of water will tell its value. The water quality component of project is one of the health sustainability issue which is being taken well within project scenario. India is one of the few nations of the world which are richly endowed with the fresh water resources. But unfortunately India lies among the top slot of the countries struggling with the water crisis too.

India accounts about 2.45 percent of world's surface area, 4 percent of world's water resources and 16 percent of world population. The total water available from precipitation in the country in a year is about 4,000 Billion cubic metre (bcm) the availability from surface water and replenishable groundwater is 1,869 bcm. Out of this only 60 percent can be put to beneficial uses. Thus the total utilizable water resource in the country is only 1,122 bcm. The total replenishable groundwater resources in the country are about 432 bcm.



River Ganga : Gaumukh Glacier

Global Warming:-

The average facade temperature of the globe has augmented more than 1 degree Fahrenheit since 1900 and the speed of warming has been almost three folds the century long average since 1970. This increase in earth's average temperature is called global warming. More or less all specialists studying the climate record of the earth have the same opinion now that human action, mainly the discharge of greenhouse gases from smokestacks, vehicles and burning forests are perhaps the leading power driving the fashion.

The intergovernmental panel on climate change (IPCC) concludes that anthropogenic greenhouse gases are responsible for most of the observed temperature increased since the middle of the twentieth century. The IPCC report indicate that global surface temperature will probably rise a further 1.1 to 6.4 °c (2.0 to 115 °f) during the twenty first century.

Glaciers are Melting:

It's really a wake-up call for environmentalists, the Himalayas have the Largest concentration of glaciers outside the polar region. The glaciers cover an area of 33,000 km. Seven Asia's greatest Rivers including the Brahmaputra, Ganges and Indus are fed with this water. We should not lose track of the fact that the water availability downstream depends to 50% on snow and glacial melting both in short and long terms. Studies have shown that most of the Himalayan glaciers are melting faster than the world average and are endangered to melt in the next 40 years. Studies have found that approximately 67 percent of Himalayan glaciers are retreating with an alarming rate.

Falling Water Table:-

The unep Paints a worrying picture of this critical, hidden, natural resources. In rural area India, 50% of irrigation water and 80% of drinking water is pumped up from underground sources by 3 million hand-pumped wells.

In India, more than 60 percent of the irrigation requirements and 85 percent of drinking water supplies are dependent on ground water.



India is the largest user of groundwater in the world presently, It is the using an estimated 230 cubic kilometers of ground water per year. However, the groundwater use was in the range of 10-20 cubic kilometers, before 1950. The country is using over 25 percent of the total global use of groundwater. India has more than 20 million bore wells in comparison to 0.2 million in USA.

These developments have created an alarming situation according to a report of the world Bank if the present trends of groundwater exploitation continues, than in 20 years about 60 percent of all aquifers in India will be in critical condition.

National River Conservation Plan:-

The National Rivers Conservation Plan (NRCP) under which Ganga action plans are formulated, now covers 35 rivers spread over 20 states. The Central Pollution Control Board (CPCB) Had initially carried out the river basin studies of major rivers in the country and on the basis of these studies first phase of Ganga action plan was launched in 1985 from Varanasi.

CPCB along with state pollution control boards is monitoring water quality of rivers and other water bodies at 1,365 locations covering 27 states and six union Territories. The monitoring network covers 282 rivers besides a number of lakes, tanks and pumps.



Clear & Clean Water of Ganga

Interlinking of Indian Rivers:-

To mitigate the needs of water through rivers interlinking is a solution for future. Government of India started with it's ambitious project of interlinking of rivers by appointing a task force headed by Suresh prabhu. it was in true with guidelines of the Supreme court issued in 2002 to complete the gigantic project casting about Rs.560,000 within next 12 to 15 years.

The completion this project will result in constant water supply for domestic use, agriculture and industries along with flood control improvement in water flow, navigation food security etc. construction of dams canals etc. and their maintenance will create opportunities for new jobs which will check the migration of people from villages to cities.

We learnt from Swajal participating interventions that time has come to prepare comprehensive and inclusive water policy that would take into account all the issues and all the effected parties involved in water budgeting. Only a holistic approach based on political will and consensus could yield a viable solution for the water and related problems prevailing in Uttarakhand, which is indeed a Herculean task.

Mr. D.R Joshi,
Unit Coordinator
(HRD & Social Development)



Stepping towards transparency Sector Information System (SIS)

Project Management Unit, Swajal has innovated a Sector Information System (SIS) for compiling, analyzing and public disclosure of the progress and procedures of Uttarakhand Rural Water Supply & Sanitation Project. The URL of the SIS is <http://gov.ua.nic.in/swajalsis> and has been hosted in nic web server. For security reason it has been audited properly.

As there are three District Implementing agencies namely Project Management Unit

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Address <http://gov.ua.nic.in/SWAJALSIS/login.aspx>

Uttarakhand Rural Water Supply & Sanitation Project
Sector Information System (SIS)

Reports

WELCOME

To be accessed by Project Authorities only.

Log In

User Name:

Password:

Some what about program: Program is based on the principles of Sector Wide Approach (SWAp). The main objective of the project is to scale up the reforms in the Rural Water Supply and Sanitation Sector. This is a pioneer project of in which SWAp principle is adopted.

Program Period: Five years (Nov 2006 to June 2012)

Sectors to be covered: Water supply & Source Conservation (80%), Sanitation (20%) and Water Quality Monitoring & Surveillance.

Agencies: Uttarakhand Peyjal Nigam, Uttarakhand Jal Sansthan & Project Management Unit (Swajal) Sector

Program Cost : 1505.00 Crore Rs. (\$ 350 million) (Inside SWAp: 963.00 Crore Rs. (\$ 224 million), Outside SWAp: 542.00 Crore Rs. (\$ 126 million))

Sector Financing : IDA: 516 Crore Rs. (\$ 120.0 million) GoI, GoUK & Communities: 989 Crore Rs. (\$ 230 million)

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Done Local intranet

Swajal, Uttarakhand Peyjal Nigam and Uttarakhand Jal Sansthan have been engaged in the project execution thus for data entry and reporting total 88 user names and passwords have been provide by the Management of Information System (MIS) unit of PMU. For the public interface of the Sector Program anybody can log on <http://gov.ua.nic.in/swajalsis> and get the updates on the program.

Before launching the program as well as for trouble shooting during the use of the various softwares under the SIS a comprehensive training and capacity building package have been imparted to engineers and software staff of all the three sectors. The training modules have been designed in a way that the users get max of hands on training. During the trainings itself the requirement of having data base at habitation level was observed and the software was updated accordingly.

Now the information available on the SIS have been being categorized into 5 different softwares

- Pre-feasibility, pertaining to baseline data of the habitations and the villages of the schemes;
- The community mobilization procedure and , User Committee structures and other Planning related details etc in Planning;
- Implementation related descriptions such as Detailed Project Report (DPR) and progress against the proposal on Implantation;
- Training and capacity building in Human Resource Development;
- And all the details of contract/ agreements on Contract software's have been given in the SIS.

Hopefully very soon all the information's of Rural Water Supply shall be available for all concerned on click of a mouse.

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Exposure Visit of officials and PRI representatives of Uttarakhand to Jananidhi Project Kerala

Communication and Capacity Development Unit (CCDU) of Department of Drinking Water, Government of Uttarakhand organised the exposure visit for officials and PRI representatives of state. The group of 16 members headed by Additional Secretary, Department of Drinking Water, GoUK including the Chairman, Zila Panchayat & Chief Development Officer District Bageshwar, State coordinator CCDU, Swap Cell In-charge officials of Uttarakhand Peyjal Nigam, Uttarakhand Jal Sansthan and engineers and specialists of the District units of all the sector institutions participated in the program. The recommendation of the program are as follows:-

Community managed Kerala Rural Water Supply & Sanitation Project is a successful model with many institutional and technical specialties. The team observed that there are many good practices that could be replicated in Uttarakhand Rural Water Supply & Sanitation Project implemented in the state under uniform policy framework of State wide Approach (SWAp) by department of Drinking Water Government of Uttarakhand.

Good Practices, Institutional:

1. Empowering like the State of Kerala the PRI in Uttarakhand should also be strengthened for the proper functioning of decentralised development initiatives like, Sector Program etc.
2. Like the KRWSA sector Program in Uttarakhand seems gradually becoming instrumental in strengthening the PRI's.
3. It has been found by a study conducted by KRWSA that in course of implementation of Jananidhi in the state many the PRI representatives have repeated their terms, even in Kozhikod District one of the Jananidhi Gram Pradhan, GP Koduvally Shri. P.T.A Rahim, have been elected as MLA and is now functioning as Revenue Minister in the state. as chairman of three tier PRI system
4. The support of the NGO should be extended up to the operation and Maintenance phase for institutionalising the O&M system particularly for handholding for institutional and financial record keeping.
5. Selection of the NGO should be strictly administered by the state and the panel of suitable NGO's shall be forwarded to the DWSM's to follow.
6. As SWAp model is an advance version of Jananidhi (old Swajal model) so more emphasis should be given to integrated implementation of TSC/ Swajaldhara/ ARWSP/ MNP/ Bharatnirman/ Natural Calamity fund/ NRDWQM & SP/ NRDWP/ Zilla Plan etc.
7. It was observed that through systematic training the capacity of the communities could be enhanced to enable them to manage the relatively tough schemes like Pumping.
8. More IEC material should be developed in local languages and more printed materials in Hindi.
9. Effective micro-planning at village level has helped to strengthen the cultural and ethnic solidarity because irrespective of the cast creed, sect and the social dynamics all have uniformly got benefit of the Jananidhi Project.
10. As the size of the Gram Panchayat is very small in our state thus efforts should be made to pool the human and other resources by making the UWSSC federations at Nayay Panchayat, Block and District level.



Meeting with KRWSA officials



11. As the women in the Uttarakhand are socially very active and are the real sufferer of the water scarcity thus there Self Help Groups should be involved in the activities like sanitation and tariff collection for raising the revenue realisation in the water supply sector the Jananidhi have practiced this model successfully in some of its GP's.
12. The general sanitary condition in the villages as well as in the towns and the cities are hygienic the sweepers and other concerned staff were found in proper uniform, there were no unattended garbage dumps anywhere, it may be because of the high literacy rate and effective functioning/ sensitisation of PRIs and ULG's, similar scenario may be carved in our state through systematic training and IEC through schools and other civil societies.

Technical

13. Kerala has an average 3000 mm annual rainfall which is 2.5 times higher than National average and about two times than our state average even though there is a rich tradition of water harvesting and recharge thus it is proposed that similar efforts should be replicated in the state of Uttarakhand. In the beginning in all village schools, Gram Panchayat Buildings, Block offices, Primary Health Centres and in all other institutional buildings Roof Top Rain Water Harvesting should be made mandatory.
14. All the abandoned wells/ dried up/ or inadequate discharge tube wells should be used as recharge sites.
15. To reduce the cost of water supply schemes the blend of GI and PVC pipes should be done in socio-technically feasible sites and emphasis should be given to optimally utilize existing infrastructures available in the villages.
16. It should be made mandatory to enlist the assets transferred to Gram Panchayat in Gram Panchayat asset register.
17. Through metering of the water cent percent tariff realisation has been attained, because the users feel that they are paying as per their consumption level.
18. As Jananidhi is on way to execute complex MVS in Tsunami affected coastal areas of the state so a mixed group of senior engineers and the field engineers should visit the State to see the functionalities.
19. Generally the scheme size in Jananidhi is 50 to 100 HHS which is similar to the demography of our region, so similar small spring/ rivulet based pumping schemes should be planned in place of large complex MVS systems.



Meeting in GP Koduvally

Financial

20. Like the state of Kerala for bringing the sense of empowerment in PRIs it is proposed to transfer funds directly from state finance commission to them. It will lead to transfer of function, fund and functionaries to the Panchayats and will definitely be helpful in making PRI's more accountable and efficient in discharging the duties endowed to them through 73rd constitutional amendment.
21. The Cost sharing ratio may be revised:
 - a. The share of the government under sector program may be reduced (upto 90%, presently it is about + 95%);
 - b. For improving the scenario of ownership in end users of Rural Water Supply schemes the community share may be raised (upto 10% in cash and kind) as the demand of the program is raising;
 - c. SC/ ST contribution may also be raised (10 % of the capital cost) and the raised part may be partially subsidised by the GoI funded like SCP and TDP.