

Uttarakhand Rural Drinking Water Supply & Sanitation Project

SWAJAL SAMACHAR



Project Management Unit

SWAJAL PROJECT

Department of Drinking Water, Uttarakhand

**School Toilet, G.P. Doran, Block-Dhanladari,
Distt. Almora**



**Garbage Pit under Solid Liquid Waste
Management Works (SLWM) Distt. Bageshwar**



**Newly constructed CWR - Gram
Panchayat Lakhni, Bageshwar**



Compost Pit under SLWM (Distt. Bageshwar)

Content

S. No	Title	Page No.
1.	From the Editor's Desk	1
2.	The Sector Program and Climate Change Initiatives	2 - 3
3.	An approach to Conserve the declining Water Sources	4 - 5
4.	Right to Information Act-2005 A View	6 - 9
5.	Uttarakhand Visit of Secretary-DDWS, Government of India (24th to 28th May, 2011)	10 - 14
6.	Uttarakhand Rural Water Supply and Sanitation Project : A Flag-bearer of the Sector Wide Approach (SWAp)	15 - 24





Editorial

Patrons

1. Shri Utpal Kumar Singh, Principal Secretary, Drinking Water, Government of Uttarakhand.
2. Shri. Kapil Lall, Director, PMU, Swajal Project, Dehradun
3. Shri. B.K. Das, Finance Controller, PMU, Dehradun

Editorial Board

Shri. K.B. Shah, State Coordinator (CCDU), Chief Editor

Shri. Munendra Badoni, Environment Specialist,

Shri. Rajendra Bhandari Community Development Specialist, Sub-editor

Shri. Sanjay Pandey, Training & Communication Specialist,

Ms. Tulika Tiwari, Training & Communication Specialist, Sub-editor

Shri. Manoj Anuragi, Resource person for English & Hindi edition, Sub-editor

Shri B.P.S. Bhandari, Typing & Design, PMU



India resides in its villages. The Country can make progress with the development of villages. Any such development comes through an integrated approach, combining the various dimensions of Community living i.e. health, environment thereby empowerment. Uttarakhand Rural Water Supply and Sanitation Project is based on this concept. Serene Beauty of Uttarakhand comes with the difficult and hard life of the people residing in its villages. With the adoption of Best Practices under Sector Program and Total Sanitation Campaign, the empowered people of these villages have given birth to positive changes in their own lives.

This issue of Swajal Samachar talks about the best practices which would inspire all to translate some of them into many success stories.

From the Editor's Desk



The Sector Program and Climate Change Initiatives

Climate change is one of the most serious threats to the environment, health and economy of our nations well as the whole world. Recent scientific studies show that global warming is already causing environment changes that will have significant global economic and social impacts. As the world's 4th largest emitter of greenhouse gases, India has to juggle the imperative demand for economic development with pressure for greater efficiency in the use of energy.

Climate change is a change in the statistical properties of the climate system when considered over long periods of time, regardless of cause. Climate change reflects a change in the energy balance of the climate system, i.e. changes the relative balance between incoming solar radiation and outgoing infrared radiation from the Earth. The threat emanates from accumulated green house gas emissions in the atmosphere, generated through long term and intensive industrial growth and high consumption life styles of developed countries.

In this league, India also needs to adapt climate changes to enhance the ecological sustainability. National Action Plan on Climate Change (NAPCC) addresses the urgent concerns of country towards climate change. Uttarakhand State has also prepared its State Action Plan on climate change. The main emphasis is on the following:-

- Enhancing carbon sink potential to reduce GHG emission by operating the pumping plants on maximum efficiency (more than 70% efficiency);
- Constructing water recharge structures;
- Rain Water Harvesting to enhance ground water level;
- Use of CFL in all office buildings;
- Plantation, construction of check dams, recharge pits, chal-khal, percolation ponds and contour trenches in all the water supply schemes;
- Focus on ensuring integrated water resource management to conserve water, minimize wastage and ensure equitable distribution across and within state;
- In line with provisions of National Water Policy, develop a framework to optimize water use;
- Recycling of waste water to meet large part of water needs of urban areas.

Uttarakhand Rural Drinking Water Supply and Sanitation Project (Sector Program) was initiated as an innovative experiment in Rural Drinking Water and Environmental Sanitation Sector. The main objective of the project aimed to deliver sustainable health and hygiene benefits to the rural



**CACMP, Vill. Maherbagati
GP - Sakand, Block Ghat,
Distt. Chamoli**

population of Uttarakhand State by improving water supply and sanitation services. Uttarakhand state is situated in the hills of Himalayas where ecological balance maintenance is of vital importance because of the continuous process of soil erosion. Depletion of water sources and drying up of water source are main threats faced by the region. Therefore, treatment of the catchment area is of utmost importance. In the sector program, as per World Bank guidelines, Catchment Area Conservation and Management Plan (CACMP) have been carried out in 25% of the water supply schemes (adversely affected) based on Vegetation, Erosion and Water Quality Assessment. Under this

program, check dams, contour trenches, percolation tanks, chal-khals, plantation works have been taken up to increase the water source discharge. Since the water supply schemes were launched through Gram Panchayats, the program has generated environmental awareness among the community. With the intervention of CACMP, the community feels proud to conserve their own environment and hygiene environmental sanitation is becoming their habit and this is a real achievement.

**EE. Neelima Garg
Uttarakhand Jal Sansthan**



An Approach to Conserve the Declining Water Sources

Uttarakhand is known for its struggle and efforts for conservation of natural resources. The landmark event in this struggle took place in 1974, when a group of women of Rainee Village of



Plantation work in Chidiyali Talli village of District - Tehri on the occasion of Hariyali Day (05th July)

district- Chamoli, through "Chipko Movement" acted to prevent the cutting of trees and reclaim their traditional forest rights and transpired hundred of such grassroots level actions throughout the state. The State is implementing the Uttarakhand Rural Water Supply and Sanitation Project in which one component "Catchment Area Conservation and Management Plan (CACMP)" is about conservation of the discharge of those water sources which are declining. The main objective of the plan is to identify the scheme whose source discharge is declining or erosion prone. The selection criteria for CACMP work is as follows:

1. Source present discharge is < 18 lpm or;
2. There is a perceived threat to water supply schemes structures due to soil erosion or;
3. The water availability declined by 20 % in three successive summer seasons or;
4. Decline in water discharge above 50 % in time series of less than a decade or;
5. Decline in water is reflected in terms of increased incidents of water borne diseases due to contaminated water or;
6. Site is Geologically & Technically suitable to propose CACMP activities;
7. Peoples willingness to participate and take up CACMP

To sensitize the community about the conservation of water sources, different types of source sustainability related activities can be carried out like; Afforestation including Fencing, Demo Grass Patch, Check Dam, Percolation Pond, Recharge Pit, Rejuvenation of existing Chal Khal, Social fencing/Awareness, LPG & Environmental Sanitation Awareness Campaign, Poly House (bamboo based) etc. At GP/ catchment level different type of activities are carried out by the district unit of Swajal Project.



Activities Organised on the Hariyali Day (05th July 2011) in different Districts

S. No.	District	Block	Gram Panchayat	Scheme Name	Name & No. of Saplings planted	Children	Women	Rural Community	PRI Representative	Govt Officials	Total
1	Pibornagarh	Mimukot	Mind Khayadit	Barnasbura	Oak, Phalyat, Pangar, Ritha, Uris (500)	10	5	15	1	3	34
2	Chamoli	Dawal, Kampryag, Narayanbagad	Suya Marai, Chulakote, Harmanai Tulli, Narayanbagar	Suya, Silangi (Sugai), Chulakote, Harmanai Tulli, Narayanbagar	Oak, Mulberry, Uris (800)	0	32	39	0	2	73
3	Champurawat	Lokaghat	Forti Derali	Ropa Tok, Mallagpen	Oak, Devdara (175)	0	3	28	2	6	39
4	Nainital	Dhari	Munjiyuli (Pahadpani)	Meladev malla	Oak, Burush - (100)	48	2	15	2	18	85
5	Pauri	Pauri	Bansari	Bansari	Oak (200)	13	12	14	1	4	44
6	Tehri	Narendranagar	Kafol Gion	Chidiyali Talli	Mulberry, Kachnar, Dulhan (140)	12	19	13	1	1	46
7	Rudrapur	Jacholi	Dangi Bhadar	Dangi	Uris, Oak, Kachnar (200)	49	20	5	5	7	87
8	Almora	Bhatishcham	Pugakote	Pugakote	Oak, Uris (500)	8	19	38	3	3	71
9	Bageshwar	Bageshwar	Kafolpan	Jamari	Kachnar (50)						0
			Binsar	Aarwali Gad	Oak, Phalyat, Jamun (1000)	5	20	64	1	7	97
10	Uttarkashi	Naugam	Dhari	Dhari Pulli	Oak, Rhinad, Dekar, Burush, Khadik (500)	11	8	18	2	3	42
						156	140	249	19	54	618

Munendra Badoni, Environment Specialist
B.P.S Bhandari, DEO, ENV





Right to Information Act-2005 A View

In 2005 Indian Govt. has been passed the one super power in common man's hand; that is Right to Information Act 2005 (RTI). In order to promote, transparency and accountability in administration, Parliament passed "Right to Information Bill, 2004 on 15th June, 2005, "The Right to Information Act" was notified in the Gazette of India on 21st June, 2005. The "Right to Information Act" has become fully operational from 12th October, 2005 to all states except state of Jammu and Kashmir, so as to enable a citizen of India to secure access to information under the control of Public Authorities.



Scheme of the Act:

The whole act is divided into 6 chapters. Chapter-1 deals with definitions. Chapter II deals with rights of citizens and obligations of public authorities. Chapter III and IV cover the constitution of Chief information commission and state information commission, Chapter V deals with powers and functions of the Information Commissions, appeals and penalties. Final Chapter VI deals with miscellaneous matters.

Important definitions

To understand the provisions of the Act and use it very effectively, we must understand the definitions more particularly the definition of words "Right", "Information" and "Public Authority" and other provisions in general.

Information

The definition of information helps us to understand what information we can seek from a public authority. The definition covers almost all forms of information. As per section 2(f), information means any material in any form including records, documents, memos, e-mails, opinions, advices, press releases, circulars, orders, logbooks, contracts, reports, papers, samples, models and data material held in any electronic form and information relating to any private body which can be accessed by a public authority under any other law for the time being in force.

Right

Another important definition is the word "right" u/s 2 (j). The word right has been defined to include a right to inspect works, documents, records, to take notes, extracts or certified copies of



documents or records, take samples of material and obtain information in form of printouts, diskettes, floppies, tape, video cassettes or in any other electronic mode through printouts.

Record

Record includes any document, file, manuscript, microfilm, facsimile copy of document, any material produced by computer {Sec2 (i)}.

Public authority

It is very important to note that this right under the Act can be used only in any body or institution created by any law of the Parliament, State legislature, owned, controlled or substantially financed by the Government. It covers even non-Government organization substantially financed directly or indirectly by the appropriate Government. Such right is not available against any private bodies or institutions. Most of the times people mistake unaided educational institutions or which are not financed as public authorities {Sec2 (b)}.

As per section 4 of the Act, imposes a legal obligation on each public authority to maintain all its records duly catalogued and indexed to facilitate every citizen, right to inspect and seek of information. It has to display full particulars of the organization's information on its websites and also by other means of communication including categories of documents held by it or under its control, budget allocated to it plans and amounts spent.

Role of Public Information Officers (PIOs)

PIOs are officers designated by the public authorities in all administrative units or offices under it to provide information to the citizens requesting for information under the Act. Functions of CIC and SIC; Central information commission (CIC) and State information commissions (SIC) are constituted under the act to look into the complaints of applicants against the PIOs and redress the complaints of citizens. They have the power of civil courts to summon witnesses and take evidence like civil courts.

Procedure for Seeking Information

As per Section 6, every citizen who desires information from public authority has to make an application in writing or through electronic means (e-mail/ fax) in English/ Hindi/ the official language of the area to the PIO, mentioning the particulars of the information sought by him. The applicant need not give any reasons/ propose / justification for seeking such information but has to pay such fees as may be prescribed. However, citizens who are below poverty line are exempted from making payment of fee. Format is given at the end.



Time Limit for Providing Information:

The PIO within 30 days from the date of application has to provide the information to applicant. If information sought relates to life and liberty of a person, the information has to be provided within 48 hrs of the request. If the interests of a third party are involved then time limit will be 40 days. If PIO fails to give the information within the specified time, it will be deemed to be a refusal to give such information. The applicant may seek remedy by an appeal.

Grounds of Rejection

PIO can refuse to give information, if the information is exempted u/s 8 or if it infringes the copy right of any person other than the state.

What is Exempt Information?

It may be noted that not all information can be inspected and sought. Certain information, disclosure of which would prejudicially affect the

- Sovereignty and integrity of India, the security, strategic, scientific or economic interests of the State, relation with foreign State or lead to incitement of an offence, will not be allowed to be inspected and provided.
- Information which has been expressly forbidden to be published by any court of law or tribunal or the disclosure of which may constitute contempt of court, or information, the disclosure of which would cause a breach of privilege of Parliament or the State Legislature can not be disclosed.
- Although, the public authority may have information which is of commercial confidence, trade secrets or intellectual property, it should not disclose such information if disclosure of such information would harm the competitive position of a third party.

However, the public authority may give such information, only if, the competent authority is satisfied that larger public interest warrants the disclosure of such information; Other personal information or information or assistance given in confidence for law enforcement or security purposes; information which would impede the process of investigation or apprehension or prosecution of offenders; cabinet papers including records of deliberations of the Council of Ministers, disclosure of which has no relationship to any public activity or interest, or which would cause unwarranted invasion of the privacy of the individual. The authorities like; Central Intelligence, RAW and Directorate of Enforcement are excluded from the purview of the act because of the sensitive nature of information disclosure of which may harm the interest of the country.



Partial Disclosure

If information sought contains both exempt and other information, Public authority can separate exempt information and disclose only that part of the record which does not contain exempt information.

Appeal

- If information sought is refused or delay is made in giving the information, a “ first appeal ” can be filed before the officer senior in rank to the PIO in the concerned public authority within 30 days from the expiry of the prescribed time limit or from the receipt of the decision.. First appeal has to dispose off within 30 days and it may extend, if it is necessary.
- Second appeal to the Central Information Commission or the State Information Commission as the case may be, within 90 days of the date on which the decision was given or should have been made by the First Appellate Authority. If any delay is there in filing appeal, it may be condoned by the Appellate Authority if sufficient cause is shown
- Third Party appeal against PIO's decision must be filed within 30 days before first Appellate Authority; and, within 90 days of the decision on the first appeal, before the appropriate Information Commission which is the second appellate authority.

Conclusion

Rights under the Act must be exercised by every citizen to expose any activities which are against the interest of public and to prevent corruption and also misuse of public office or position.

**Sanjay Pandey, T&C Specialist,
PMU - Dehra Dun**



Uttarakhand Visit of Secretary-DDWS, GoI (24th to 28th May, 2011)



With members of UWSSC

On 24th May, 2011 I visited Sapera basti Bhaniyawala, a single village, deep bore well, pumping water supply scheme covering 8 habitations with approx. 313 households constructed under the Swajal-II program at a cost of approx. R 49 lakhs. The planning phase of the scheme was completed in October 2008 and thereafter work was executed by the Upbhokta Sub-Committee of Peyjal and Swachhata with Smt. Sudesh Devi (S.C.) as Chairperson and 7 other members. I was given to understand that so far 5.8 Kms distribution lines have been completed and more than 200

families have taken household connections. The Treasurer of the Society informed us that every single household pays the monthly tariff as fixed by the Society regularly. People seemed very happy with the water supply. Swajal-I had required a minimum contribution of 10 % by the community. However, for Swajal-II, the Government of Uttarakhand has taken a decision that per capita family contribution will be limited to ₹ 600/- and as such the response has been extremely encouraging. In the current scheme, the community contribution has been ₹ 58,000/- which is slightly more than 1 % of the project cost. But the community has been able to manage the scheme on its own and provide satisfactory service after commencement of the project. Now, I am told that they are going to take up a 100 % metering program in the village.

There were several other Pradhan from neighbouring Gram Panchayats who demanded that their village should also be taken up under the Swajal-II program. Director (Swajal) Mr. Kapil Lall explained to them the procedure to be followed to include their village under Swajal-II program and promised that as and when an application is received, suitable action will be taken according to the norms established. The same day, I visited a gravity based scheme at Kandoli village, Sahaspur -



Block of District Dehradun. The scheme covers 11 habitations and the present population of 1776 (348 households). The scheme is designed for a population of 2445. The scheme was started in 2007 and completed in 2009. Shri Megh Singh is the Chairman of UWSCC which has 12 other members. Under the scheme 180 private connections and 5 Stand Posts have been provided. The cost of the Scheme has been ₹ 84.86 lakhs of which the community contribution was only ₹ 80,000/- (approx. 1%). The scheme collects ₹ 60.00 per month from private connection users and being a gravity scheme, the O&M expenses are minimal (approx. ₹ 44,000/0) and as such the UWSCC has a bank balance of about ₹ 1.6 lakh. The UWSCC has been able to undertake the small repairs of damages caused by last year's severe rains and landslides on its own. As will be seen, the per capita expenditure was approx. ₹ 3,000.00 in case of Sapera Basti scheme whereas in the Kandoli scheme, according to the designed population it is about ₹ 3,500/-. Director (Swajal) informed me that their office maintains these details for every single scheme in the entire State. Kandoli village was awarded NGP status in 2008-09 and the villagers informed me that there has been no slip back of the same.



**District laboratory of
UJS at Dehradun**

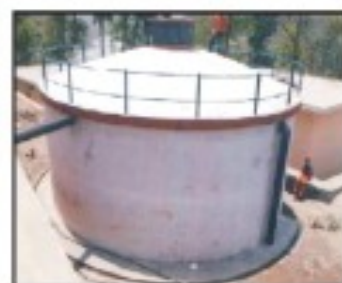
The same day I visited the Water Quality Testing facility at Dehradun which has recently been upgraded with installation of many new types of equipment. The laboratory among other things also has an Atomic Absorption Spectrometer (AAS) with trained manpower and as such is capable of conducting a large range of tests. The officers informed me that they propose to undertake a complete test of all parameters for all sources of Uttarakhand in a progressive manner. However, they pointed out that a complete test of all these parameters will cost approx. ₹ 6000/- per test. They were advised that the quality of water is not so bad in Uttarakhand that every source will require a complete test. In fact, there are a very few quality affected villages in Uttarakhand. It was suggested to them that after preliminary tests at the field and District Labs, further investigations should be taken up only for those; where detailed investigations are needed. Merely, as routine, conducting tests of all kinds of contamination may not be required. It was also suggested to them that this laboratory should be declared as a State level referral laboratory and facilities to general public should also be provided on payment basis for any sample testing they want to undertake.

The same day, I had a detailed discussion with the Chief Secretary, Government of Uttarakhand and other officials of the State. Unfortunately, Uttarakhand could not draw the second installment in 2010-11. This was primarily on account of the fact that Uttarakhand Government is committed to the State Wide Sector Reforms Agenda of the World Bank which requires a rigorous discipline of community participation and change in the mindset of both people and the implementing agencies. Uttarakhand also had to face severe landslides and heavy rains which damaged almost 6000 water supply schemes last year. However, this year the officers were confident that Sector Reforms process is well in place and the expenditure will go up and the State will be in a



position to draw its full allotment. Managing Director, Uttarakhand Jal Nigam pointed out to some difficulties in following the procurement guidelines of the World Bank. However, Principal Secretary, Uttarakhand was confident that this issue can be sorted out at the state level. It was suggested to them that in case any intervention is required at the GoI level, we shall be very happy to provide the same. The officers were also informed of the fact that there is a wide discrepancy between the total coverage reported by the State and the NSSO Report (2008-09) of coverage under the TSC. This difference of almost 58% is huge by any standards. The State promised that they have taken up intensive IEC program and both the coverage and usage will improve. Swajal has developed a very good network of support organizations, so it is hoped that the TSC program will also be benefited by the contribution of these support organizations and the plan as finalized in consultation with the State Government this year will be implemented in real earnest.

On 25th May, I visited Makheli Water Supply Scheme in Bhatwari Block of District Uttarkashi. Makheli is a part of the Gram Panchayat Malla which has several small habitations; each with individual water supply scheme. Makheli is gravity based Spring Source Scheme with a Discharge of 12 LPM. The source work and the supply work have been completed and the work of distribution main is in progress. The UWSCC has been formed and necessary accounts have been opened. This was a NC habitation and people were found to be happy with the water supply scheme. While this seems to be a good program but per capita expenditure of approx. ₹25000/- will continue to be a cause of concern, the Department should explore whether more people can be covered from such expensive projects.



**Clear Water Reservoir
(CWR) Makheli w/ s scheme**

I also visited the proposed site for Laloor Patti Water Supply Scheme. The scheme proposes to cover 48 numbers of habitations at an estimated cost of ₹14 crore. The scheme will have one intake well, one treatment plant, rising main 8.33 Km. four pumping stations, staff quarters 12 and 10 Kms of transmission lines. The land for treatment plant has been acquired and the villager seems very happy with the land acquisition process. The tenders for the scheme were to be opened during the next week and the officers in the field thought that they would be able to complete this scheme in a short period. This scheme will cover habitations and the borders of the Uttarkashi and Tehri districts where the water supply has been marginal and difficult.

The next day, I visited NGP village Harshil which was en-route to Gangotri. Every single household of the village had toilet coverage and the village roads were kept clean and tidy, as Harshil also happens to be a place of tourist attraction. While sanitation coverage was satisfactory, there were some complaints by villagers regarding lack of proper water pressure in all the villages. Chief Engineer, Uttarakhand Jal Sansthan, who was present with me during the village tour, assured that this being a simple matter will be immediately attended to.



Community interaction

The issue of providing Solid Waste Management support to facilitate clean villages and habitations on the yatra routes was also discussed with the State Government officials. It was decided that since these routes receive thousands of people from outside, it is necessary that all important rural habitations on these routes should have proper sanitation and Solid Waste Management coverage. The Project Director, CCDU assured that the work will be taken up on selected important habitations with large habitations and large floating population.

During the visit at almost all the places, elected representatives of various Panchayats requested that Independent Stand Alone Single Village schemes on Swajal-II pattern be provided to them. Their argument was that the water being supplied through Uttarakhand Jal Sansthan schemes is not sufficient and cannot be relied upon. The state, obviously, will have to take steps on this. The scheme priorities, of course will be to those Partially Covered Villages which have a larger population to be covered. According to the Information supplied by the state, the work on 169 pipe water schemes was started from 2006-07 onwards of which only 7 could be completed so far. Though the progress in approx. 95 schemes is more than 50%, the fact remains that a large number of schemes are yet to be completed which again will have to be a priority of the State Government. It is heartening



In conversation with community of Nirmal Gram Panchayat - Harshil



Meeting with officials of Swajal, UJN & UJS

to see that Swajal has developed a Management Information System which covers not only the Swajal program but also the Uttarakhand Jal Nigam and Uttarakhand Jal Sansthan projects. While data uploading for the Swajal program is almost complete, the same for Uttarakhand Jal Nigam and Uttarakhand Jal Sansthan projects is at an advance stage. Once this data is entered into the Management Information System, allocation of resources and review of the program will record a qualitative improvement. I was assured that the updation of data will be completed by 30th June, 2011.

After the field visit and the discussion with the State Government officials one is hopeful that financial utilization and physical progress will show a substantial improvement in the current financial year in the State.

Input from <http://ddws.nic.in>



URWSSP: A Flag-bearer of the Sector Wide Approach

The pilot phase of the rural water supply and sanitation project implemented in Uttar Pradesh and Uttarakhand (popularly known as Swajal Project) during 1996-2003 became a sector model in India. Demonstrated success of the Swajal Pilot Project encouraged the Government of Uttarakhand to scale it up for improved coverage in the state, adopting a sector-wide approach. The scaled up project, now called the Uttarakhand Rural Water Supply and Sanitation Project ('Global First' rural water supply and sanitation project), is unique on several counts. Concepts such as decentralization, partnership, community management, effective demand, and gender analysis and cost recovery are deeply engrained in the project principles adhering to the 73rd constitutional amendment of the Indian Constitution.

The project covers the entire rural Uttarakhand and is facilitated by the Department of Drinking Water, Government of Uttarakhand and executed by three agencies namely Uttarakhand Peyjal Nigam (UJN), Uttarakhand Jal Sansthan (UJS) and Project Management Unit (Swajal). IDA-World Bank, Government of India, Government of Uttarakhand and rural beneficiary communities jointly fund the project. The project has a total budget of US\$ 224 million of which the IDA credit is limited to a maximum of US\$ 120 million. The project commenced operations in November 2006 and will conclude in June 2012. Uttarakhand Rural Water Supply and Sanitation Project: A Flag-bearer of the Sector Wide Approach. This case study attempts to:

- (i) Describe the project in brief;
- (ii) Identify some unique characteristics of the project;
- (iii) Share experiences and good practices under the project, including their applicability and efficacy in improving sustainable service for the rural communities; and
- (iv) Detail lessons learnt for better working and planning with communities.

The delivery of sustainable rural water supply and sanitation service is an issue of considerable concern among policy planners and water sector managers of the country. The case study is intended for managers and planners who are concerned with the challenging problem of how to deliver sustainable water supply and sanitation services in the rural areas. Evidence exists to support the fact that sustainable delivery of water supply and sanitation services encompasses not only technical issues, but also managerial, social, financial and institutional. The current project design is such that it moves away from the target-based, supply-driven model to a demand-based approach where users get the service they want and are willing to pay for it across the rural area of the state, i.e., across the sector. The basic principles for reform in the rural water supply and sanitation service sector include community participation in the planning, implementation, O&M for the scheme of its choice, and the changing role of the government from that of a service provider to a



facilitator. The unique features of the project have benefited/are benefiting rural communities in several ways. Admittedly, the culture of dependence on outsiders for a basic necessity like water supply has been considerably reduced by the empowered User Water Supply and Sanitation Committees (UWSSCs) regarding quality, quantity, service level and system reliability of the water supply scheme. The benefits accrued to communities due to sustainable O&M of the water supply scheme by the VWSC include:

- (i) Reduction in coping cost as well as more availability of household space due to elimination of storing water in larger containers;
- (ii) Elimination of travel time and travel cost in lodging no-water complaints, making payment of bills/getting corrections in wrong bills and getting sanction of new water connection;
- (iii) Improvement in Mean Time Between Failure (MTBF) due to better quality of repairs and strict control/ supervision by the community; and
- (iv) Most importantly, reduced bureaucracy.

Water scarcity in hilly regions is a major issue being faced by the state. Data from existing water supply schemes indicated that nearly 30 percent of the schemes suffered from a decrease in the availability of water, especially during the summer months, because of depletion of water sources. This also caused 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 was aggravated by water supply systems which had outlived their design life, and inadequate O&M. It is widely recognized that supply-driven rural water supply and sanitation service delivery does not adequately serve the requirements of user communities as they are often located at sites without consideration of community needs or preference. Planning of rural water supply and sanitation 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. The current project significantly differs from previous efforts to supply water. The tenets of the current project include:

- (i) A community-led participatory program which aimed to provide drinking water facilities in rural areas with minimum provision of 40 lpcd;
- (ii) Adoption of a demand-responsive, adaptable approach along with community participation based on empowerment of villagers to ensure their full participation in the project through a decision making role in the choice of the drinking water scheme, planning, design, implementation, control of finances and management arrangements;
- (iii) Full ownership of drinking water assets with UWSSCs;
- (iv) Communities have the powers to plan, implement, Operate, maintain and manage all water supply and sanitation schemes;



- (v) Partial capital cost sharing either in cash or kind including labour or both, 100 percent responsibility of O&M by the users;
- (vi) An integrated service delivery mechanism;
- (vii) Taking up of conservation measures through rainwater harvesting and ground water recharge systems for sustained drinking water supply;
- (viii) Shifting the role of government from direct service delivery to that of planning, policy formulation, monitoring and evaluation and partial financial support.

The project's development objective is to improve the effectiveness of rural water supply and sanitation services through decentralization and increased role of PRIs and involvement of local communities in the state. The project is also aimed at bringing associated benefits, including improved health resulting from reduced waterborne diseases, environmental sustainability through protection and management of water source catchment areas, and time savings in fetching water, especially for women. The project envisages upgrading no or partial coverage of water supply to full coverage with sustainable service, benefiting at least 1.2 million people, or 20 percent of the rural population. The project will also improve sanitation in about 30 percent of rural communities, to be declared ODF. Recognizing the need for scaling up reforms, the Government of Uttarakhand issued its rural water supply and sanitation sector policy. The key elements of the policy included:

- (i) Decentralized service delivery through devolution of administrative, executive, and financial powers to the three-tier PRI institutions;
- (ii) Establishment of the State Water and Sanitation Mission (SWSM) and District Water and Sanitation Missions (DWSMs), to oversee the policy and planning for the sector;
- (iii) Adoption of an integrated approach to service delivery, linking water supply, sanitation, health and hygiene, catchment-area conservation, and community development initiatives. Proactive ness of top political leadership and committed bureaucracy, willingness to implement reforms at the senior level and a broad consensus of priorities created momentum and legitimacy to drive the Sector Wide Approach (SWAp) program. The progress of SWAp has been made an integral part of Annual Confidential Reports.

Introduction of uniform computerized accounting system:

It was recognized that the timely reimbursement of project cost is dependent on timely preparation of the consolidated financial statement. Therefore, a computerized accounting system having an 'account code classification system' was operationalized in all implementing agency offices.



Adequate change management:

Appropriate change management efforts to shift the mindset of the sector institutions from service provider to a facilitator were whole-heartedly taken up by engaging reputed training institutes.

Manuals :

Manuals such as operations, procurement, financial management and technical for implementation of the project were prepared and agreed with the World Bank before embarking on actual implementation.

Information, Education and Communication (IEC) :

The project printed booklets, leaflets, and posters that provided messages on the project, including use of toilets, health and hygiene aspects. A documentary film depicting detailed processes for implementation of the project was prepared.

This case study does not highlight the case of a particular water supply scheme but dwells on essential features of the project as a whole. The project is being executed by three line agencies: Project Management Unit Swajal, UJS and UJN. SWSM and DWSM oversee the activities of three line agencies at the state and district level. All decisions for planning, design, implementation and maintenance are decentralized at the district and village level. The village UWSSC under the GP is fully responsible for the intra-village scheme design, procurement, implementation and management. UJS and UJN are responsible for bulk water supply under multi-village schemes. Support organizations are contracted for community development and technical support to the UWSSCs. They are contracted by the district implementing agency, based on a district specific short list of applicants, as per procurement guidelines. The project mobilizes households for group action through the UWSSC, a subcommittee of the GP. The composition of the UWSSC is interesting as rural women constitute 30 percent, with an equal number from SC and ST households. Communities have shown tremendous interest and enthusiasm in shouldering responsibilities, including procurement and financial management activities. The total water sector investment committed is US\$ 224 million for the SWAp. Partners for the SWAp pool (US\$ 224 million) include Government of India (31 percent), Government of Uttarakhand (67 percent); and the User Communities (3 percent) financial share. The IDA will reimburse the Government of Uttarakhand share of SWAp basket up to US\$ 120 Million, against an annually varying reimbursement pattern, agreed in the Project Appraisal Document. The three sub-components and percentage share by the Government of Uttarakhand are given in Table 11.



The following project cycle is followed for detailed planning, implementation and O&M:

Project cycle for single village schemes: Each scheme cycle includes four phases, including pre-planning (two months), planning (three to six months), implementation (six to 18 months), and O&M phase (four months). The duration of each phase depends on the scheme size, technology type and the time it takes to mobilize the communities.

Table 11: Component-wise SWAp budget share of the Government of Uttarakhand

S.No	SWAp Program Components	Total Budget Million S	GoU Share %	% IDA Reimbursement
A	RWSS Development	5.02	5.02	100 %
B	RWSS Infrastructure Investments	196.78	103.40	53 %
C	Program Management Support and M & E	22.09	11.60	52 %
	Total	224.00	120.00	54 %

- (a). **Pre-Planning Phase:** Major outputs of the pre-planning phase include: i) selection of support organizations; and ii) collection of baseline data; and iii) selection of GP/habitation. Since the GP is not a homogenous unit, most of the information is collected from each habitation of the GP to understand the access of different socio-economic groups to water and sanitation facilities.
- (b). **Planning Phase:** This phase includes: i) mobilization of communities, participatory planning, and use of SARAR tools, problem investigation, analysis and solving; ii) formation of UWSSC; iii) selection of water supply and sanitation technology by the users in community-wide meetings; iv) capacity building on community development, health, feasibility and design of water supply schemes, catchment area protection, accounting, etc., for support organization/GP/UWSSCs members; v) preparation of detailed project reports and community action plan for each UWSSC; vi) collecting upfront cash and O&M community contribution for water supply, sanitation, and catchment area protection works; and vii) involvement of women and marginalized sections of community in the entire planning phase.
- (c). **Implementation Phase:** The outputs of this phase include: i) preparation of implementation phase proposal, construction of water supply schemes, environmental sanitation works and catchment area protection works by GP/UWSSC through community engineers contracted out by District Implementing Agency (DIA); ii) independent third party construction supervision by the Service Agency and facilitation and monitoring by DIA, contracted out by SWSM; iii) collecting balance cash/labour and O&M community contribution for water



supply, sanitation, and catchment area protection works; iv) training on community development, health, women's development initiatives, book keeping, O&M (technical, institutional, financial), etc., for GP/UWSSC members; and v) preparation of the implementation phase completion reports.

- (d). **O & M phase:** DIA provides technical assistance to the UWSSCs after commissioning of the water supply schemes to place the O&M system in order. Training at the GP/UWSSC level is conducted by DIA. The O&M system comprises the technical, financial, and the institutional systems. After establishing O&M system and completing all the activities stipulated in the agreement, the DIA formally exits from the GP. Thereafter, the scheme's maintenance continues to be carried out by the UWSSC. However, the sector agencies continue to monitor and support the GPs on O&M issues, including large repairs, which cannot be undertaken at the GP level.

Support Organizations and Service Agencies

NGOs and community-based organizations are involved in the sector program as a link between the beneficiary communities and the district implementing agencies. Acting as catalysts in the process, they are involved in the scheme cycle activities in motivating and mobilizing the communities and building their capacities towards their envisaged roles and responsibilities in the management of their water and sanitation schemes. The challenges for the project were to develop a system which embodies the philosophy of the demand-responsive approach, and provides an alternative to supply-driven service delivery mechanism. The challenges for the implementing agency were to act as a facilitator and co-financier (to provide assistance at appropriate time and ensure capital cost sharing by the community), as a Monitor (process and progress) and as an agency to ensure the standards of construction, Accounts and Community Development activities. The innovations and interventions at various levels are discussed in following paragraphs. Appropriate change management Efforts to shift the mindset of the Sector institutions from service Provider to facilitator were wholeheartedly taken up by engaging reputed training institutes. Steps had to be initiated for focusing on O&M aspects for the sustainability of schemes in addition to the training programs on the design and implementation of rural Water and sanitation schemes. How and where to interact with district level formal institutions had to be focused on during capacity building in order to cover the eventualities of major repair works. The Project Appraisal Document and Operations Manual provide that the SWAp principles be followed for all new investments. It was recognized that in 'exceptional situations' the principles of 'demand' responsive community participation may not be practical. Examples of such exceptional situations include: damages due to natural calamities, damages due to road construction activities, and water supply schemes for tourists en route pilgrimage sites; and emergencies such as floods, drought, epidemics, etc. The policy exceptions were sought from the World Bank. The Sixth Implementation Support Mission, April, 2010, of the World Bank in its Aide-Memoir has given the project rating shown in Table 12.



Table 12: World Bank Project Rating

Key Project Data		Current Ratings & Flags	
Effectiveness Date	11/30/2006	Development Objectives	Satisfactory
Closing Date	06/30/2012	Implementation Progress	Moderately Satisfactory
Project Age	3.4 yrs	Problem Flags	None
% Disbursed	21		

The project is being implemented by following uniform policies and institutional arrangements across the state. *Schemes covering more than 1,800 habitations have already laid a solid foundation for the SWAp program in Uttarakhand.*

The decentralized institutional arrangements, processes and procedures are established and fully operational in all the 13 districts. The GPs through UWSSCs are fully responsible for Single Village Scheme (SVS) and intra-village Multi Village Scheme (MVS). The sector institutions are responsible for bulk water supply under the MVS. The water supply schemes are integrated with catchment area programs, household and village environmental sanitation programs, solid waste management and health and hygiene awareness promotion programs, in order to maximize water supply and health benefits to the communities. Compared to the pre-project household coverage of sanitary latrines at 21 percent, the existing project coverage has gone up to 71 percent, a difference of 50 percent achievement as a result of the project efforts and the Centre sponsored Total Sanitation Campaign. The NGP for clean villages has been received by 25 percent GPs (418 GPs) against the target of 15 percent GPs.

While independent monitoring and social audits are in-built in the project design, the implementing agencies have started signing off, providing quality assurance for the completed schemes. Also, continuous supervision has been introduced during the O&M stage to ensure technical and financial support to the GPs. The district schedule of rates for various engineering items/ works/ materials (local and non local) are jointly prepared by all the three implementing agencies, based on the existing analysis of rates and are approved by the DWSM. This schedule of rates is updated on a yearly basis or as and when needed. Thus there is a single set of schedule of rates for each district and for all the implementing agencies. The culture of dependence on outsiders for a basic necessity like water is showing a diminishing trend leading to a positive indication of Gram Swarajya (village self rule), in other words, 'community pride and community control'. Robust monitoring is followed to monitor processes, inputs, outputs and outcomes, including indicators of change under the project. Governance and accountability measures have been adopted as an integral part of the project design and implementation. The Swajal Project Management Unit has consecutively received the Right to Information (RTI) award 2009 and 2010 for transparency and good governance practices, which include independent quality checks, community monitoring, grievance redressal measures, social audits, robust monitoring and evaluation, and sector-wide



information system, for information disclosure and tracking progress of the schemes in all phases of the project.

Capacity Building of all Stakeholders: Capacity Building of all Stakeholders was essential for effective and efficient implementation of the project. Therefore, a comprehensive capacity building plan was developed and included detailed and program training modules for:

- (i) SWSM and Program Management Unit;
- (ii) DWSMs and District Program Management Units;
- (iii) Change management and community development skills for sector institutions;
- (iv) General training activities for PRIs; and
- (v) Training of support organizations and support agencies.

Special training programs have been developed and implemented through the local training institutions to sensitize the state, district and village stakeholders and functionaries regarding the project. These programs include modules on planning and implementation of SVS and MVS, environmental and sanitation hygiene awareness programs and practices, financial and procurement management practices, etc.

Information Education and Communication (IEC) : The project has printed booklets, leaflets and posters that provide messages on the project, including health and hygiene, Total Sanitation Campaign, technology options for sanitation, use of toilets, good practice case studies, informal education, along with roles and responsibilities at the state, district and village levels. IEC activities, mainly to promote the decentralization agenda and SWAp program, have been carried out through workshops, cross-visits, competitions, IEC stalls, television programs, etc. A couple of short documentary films have been prepared on the good practices currently being implemented under the project.

Governance and Accountability Processes Adopted: Independent reviews are an integral part of the project processes, including concurrent monitoring during the scheme planning phase, third party construction quality checks, technical audits, social audits and grievance redressal measures during the scheme implementation phase. The project clearly defines the roles and responsibilities of the beneficiary communities and community-based organizations, NGOs, independent reviewers, PRIs, SWSM and the implementing agencies.

PRI and Community Mobilization: The project has made a commendable effort in identifying, prioritizing and selecting GPs/ villages / habitations for intervention. Subsequently, households in the selected habitations have been mobilized into UWSSCs; sub-committees of the GP, which have proved to be an effective vehicle of community participation. The support organizations have



contributed significantly towards mobilizing as well as capacitating the local communities. User surveys confirm full acceptance and satisfaction by the communities for water supply and sanitation

Schemes implemented under the project. Since it was recognized that the support organizations would play the key role in achieving effective community participation, efforts were made to ensure that they would be selected and trained in an appropriate manner.

Social Audit Committee: This committee is constituted in each water supply scheme. The Social Audit Committee performs the following functions:

- i) Ensure that all the committees follow the Procurement Manual;
- ii) Reports any violation or deviation of rules to GP;
- iii) Monitors the adherence of project principles and rules in selection of beneficiaries, implementation of sub projects, and all decisions of UWSSC.

Grievance Redressal Mechanism: The project provides for complete decentralization in the preplanning, planning, procurement, construction and O&M of water supply schemes at grassroot levels where decisions are taken by the concerned UWSSC with assistance of the GP and facilitation by the support organization and DIA.

Grievance Redressal at UWSSC Level: On receipt of a grievance, the UWSSC convenes a community wide meeting and it is put up before the members of the UWSSC and the community. This process is facilitated by DIA and the representatives of the support organization and the GP. It is noteworthy to mention here that 146 out of total 154 grievances relating to various categories are already attended to the satisfaction of the complainant since the inception of the project.

All steps are being taken during design, implementation and maintenance stages to ensure sustainability of schemes. The project is currently ongoing and a periodic review will be carried out to monitor sustainability. The project has designed a Sustainability Evaluation Exercise (SEE) to assess the sustainability of completed schemes which are more than one year old. The Indian Institute of Public Administration has been engaged to conduct the independent study on sustainability perspectives. The study would be completed by March 2011. This project has been a trend setter in the rural water supply and sanitation sector for adopting a sector wide approach. The effective and efficient functioning of implementing agencies has reinforced the hypothesis that proper orientation and training, a mix of skills, experience and gender can work in tandem to achieve positive results. It has been proved that the partnership between village communities, NGOs and the government, where the government takes the role of facilitation and co-financing, has worked successfully. The project has demonstrated that the communities can efficiently and effectively handle dispute resolutions, material procurement, financial transactions and record/ book keeping in a satisfactory



manner, when properly trained. Catchment area protection works and water supply scheme construction works should be implemented simultaneously so that the sustainability of the tapped water source can be monitored during the project period itself.

The project has largely demonstrated that as long as a demand-responsive approach is adopted, communities are willing to contribute towards capital cost and plan, implement, operate and maintain their own schemes. The project has demonstrated that an alternative delivery system vis-à-vis the present top down government-dominated system is not only desirable but also feasible in the sector. The capacity of the communities and the NGOs has been upgraded to such a degree that the methodology of the project can be successfully carried over to other development areas. A gender balance approach is important to ensure that both women and men have the same opportunities to influence and control the new services and share their benefits. Observation study tours and exposure visits have been found to be an effective tool in creating necessary awareness and in changing the mindset of policy makers. The possibility of misappropriating and misusing the funds is minimal if transparency at each stage is adhered to and monitored. Irrespective of the source of funding, there should be a uniform policy regarding capital cost sharing as well as O&M. Otherwise the current systems are unsustainable.

**By: Kapil Lall, Director, Project Management Unit,
Uttarakhand Rural Water Supply & Sanitation Project, Dehradun
As printed in the DDWS (Government of India)
WSP Compendium under the State Level Reform Category**