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# Capacity building of Junior Engineers from Public Health Engineering Department, Gurgaon

Training Report Submitted by **SaciWATERS**

Submitted to  
Public Health Engineering Department (PHED),  
Gurgaon

Organised by

**SaciWATERS**

[www.saciwaters.org/periurban](http://www.saciwaters.org/periurban)



The capacity-building and training workshop of the employees of the PHED (Public Health and Engineering Department) was organized on April 12, 2012. It was attended by nineteen employees of the rank of Junior Engineer (JE), two employees of the rank of Sub-divisional Engineer (SDE) and two employees of the rank of Executive Engineer (EE). They represented the divisions of Gurgaon, Faridabad and Sohna of the Gurgaon district of Haryana.

Participants from Gurgaon, Faridabad and Sohna divisions of PHED at the venue of training



The workshop began with an introduction by Dr. Anjal Prakash on SaciWATERS and its activities as well as the ongoing IDRC supported project on Water Security in Peri-urban South Asia – Adapting to Climate Change and Urbanization. He then lead the participants through an ice-breaking exercise, in which they were given cards to introduce themselves in pairs and to share their expectations from the workshop as well as one major challenge, which they faced in their jobs and with regard to dealing with water as a resource.



Dr. Anjal Prakash briefing the participants about peri-urban water security project (Left Picture). PHED Officials penning down their expectations from the training (Right Picture).

The participants identified several challenges that they were faced with: prominent among these were the low awareness among water users about how precious water resources were, rampant misuse of water, widespread illegal connections, abuse by water users including threats and occasional physical violence, poor distribution infrastructure and frequent burning of motors. While some were a bit apprehensive about the goals of the workshop and could not identify any concrete expectations, others said that they expected that SaciWATERS would enhance their skills in dealing with water management in peri-urban areas in view of the growing population and rapid urban expansion. They expected that the workshop would hone their skills in providing potable water, creating awareness among water users about the prudent use of water and controlling its wastage. On the lighter side, many participants said that they were looking forward to a day of fun and frolic.

Participants sharing with their colleagues, expectations from the training, organizational challenges and challenges of dealing with water as a resource



Many participants mentioned that their mobile phones were a nuisance as they received calls and complaints at odd hours, intruding into their personal lives and privacy; for many the concern was that the state had not provided mobile phones even as important official messages needed to be sent to them. They expressed concern over lack of fear of public authority among water users because of which they misused water and abused PHED property. While electricity thefts were considered a punishable offense, the same did not seem to apply to water, as it was considered a much more basic good and therefore water thefts were legitimate ways of quenching thirst and meeting basic needs. Another issue was the relationship between energy and water; on account of erratic power supply, water users pump water, whenever electricity is available. "If there were 26 hours in a day and power was available for that time, water users would pump water that long", as one of the participants stated. Understaffing, absence of mutual accountability, and the unholy relationship between the water users and providers were some of the problems that hindered effective service provisioning.



Dr. Anjal Prakash and Dr. Vishal Narain interacting with participants during the training program

This was followed by a presentation by Dr. Vishal Narain who spoke about the need for the training of the employees of the PHED in the larger context of the current project. He said that urbanization and climate change were both impacting the water availability in peri-urban locations. These were aggravating the impacts of water insecurity already experienced by people on account of such factors as caste, class, gender and location. He gave an overview of the locations in Gurgaon where the SaciWATERS team was working and said that in two of the villages, the team was trying to provide a forum for communication between the villagers and water service providers. While the project is only for a period of three years, a long term engagement of the workshop participants with their field settings made a case for a sensitization to issues of peri-urban water security. While the participants already had a good grounding in engineering and technical issues, water management is much more of a socio-technical process, requiring a deep understanding of both the technical and the social. The aim of the workshop was to supplement and enhance their skills in dealing with managerial and social issues.

Dr. Vishal Narain briefing PHED officials about rationale of the training in context of the Peri-urban water security project



He said that managing water effectively needs a positive and affirmative relationship between water providers and users. This relationship needs to change from one of confrontation and passing blame and accusations – as witnessed throughout the association of the team with the research sites – to one of understanding and cooperation. In academic language, this is described as a prisoners' dilemma, or a situation of anarchy. Water users and providers are two sides of the same coin. Most prescriptions for improving water service delivery focus on mobilizing the community; however, community mobilization itself makes little sense in the absence of a reorientation of the bureaucracy. Therefore, both sides need to be reoriented and sensitized to each others' position and engage in dialogue to come to solutions.



This was followed by an interesting role play led by Dr. Anjal Prakash in which the participants were split into two groups; one each representing the villagers and the PHED. Two senior participants were designated as observers. The team representing the village then approached the team representing the PHED. It was a usual scene of recrimination that occurs between the two sides. The villagers complained to the PHED regarding the absence of water supply for ten days; a blame game and accusations followed. There was immense chaos and noise.



Participants during the role play activity. In the pictures, group of villagers are acting out a scene when the village water supply has ceased for many days

After the role play, the observers presented their observations, namely, that the villagers while accusing the PHED of poor supply did not mention the specific problem or reasons. Nor did the PHED representatives try to find out or explore what the problem was. It seemed that the motor was functional, but the PHED did not explore the reasons for the problem. Besides, the senior members of the PHED also did not instruct their juniors to act or respond promptly. They should have shown some urgency to respond or to act proactively. The overall message was that both sides should have communicated more effectively and clearly.

In the role play activity, the group above represented the PHED officials (Left Picture). As part of the role play, a dialogue in progress between the villagers and PHED officials (Right Picture)



This was followed by a discussion on several problems in providing water supply to peri-urban locations. An important issue raised was that rapid urbanization invites migrants who come in as temporary settlers in areas where they are not registered or shown as inhabitants. This leads to underestimation of population to be served and results in several errors in planning. There is a discrepancy between population as shown in records and the actual population, which results in under-provisioning. Since water is considered basic to human sustenance, water thefts are not even recognized. Field staff members often face the lure of money as a corrupting influence on one hand and threats and physical assault on the other. Even if PHED property is damaged and an FIR is sought



PHED officials actively participated in all the sessions of the training. In the pictures, participants can be seen putting forward their points

to be lodged, such a request is not entertained. Some JEs had made some efforts at their own level to improve water supply in the villages they were serving by getting them a water supply connection. However, once they were transferred these water supply lines had been removed. Once some people in a village get water, it raises the expectations of the others who exercise all forms of influence and threats to get water. They consider water their right, but do not exercise care about their duties.

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This was followed by a short presentation by Dr. Anjal Prakash on gender issues in water supply and he shared experience with a range of water supply improvement options and solutions in peri-urban, urban and informal contexts. He also gave examples of cases where water supply had improved even under conditions of water scarcity and suggested the possibility of organizing an exposure visit of PHED employees to witness some successful experiments. He spoke about the swajaldhara experiments where committees were mobilized to take over the management and distribution of water infrastructure. While there are solutions possible, they are not mobilized because professionals work in silos.

In the afternoon, the group was joined by representatives from Sultanpur village. The afternoon session began with the screening of a participatory video that was scripted, acted out and shot by a group of women from Jhanjhrola Khera. The video was about the health effects of consuming unsafe water and how women could take precautions through a wide range of options for treating water before drinking. Those who made the video had urged that this be shown to representatives of the PHED.

Screening of Participatory Video from Jhanjhrola Khera, one of the intervention villages under water security project (Left Picture). The village headman from Sultanpur interacting with PHED officials (Right Picture)



This was followed by a dialogue between the representatives of Sultanpur and the workshop participants. The former shared their experiences and problems in getting drinking water in the village. They said that the drinking water used to be sweet; it had now become saline. They get water from the Gurgaon Water Supply Channel. There is a problem of water distribution internally, because the current layout of pipes are made of cement, that have worn out and are easily ruptured, often broken or people pull illegal connections. All areas within the village are also not covered by pipelines. These pipes need to be replaced by D.I. (Ductile Iron) pipes.

The workshop participants from the PHED said that it was important to have tuts (taps) installed at all the connections to prevent wastage of water. There was now a move to install D.I. pipes in new systems to prevent illegal connections and wastage or leakage of water. There is a move to hand over water distribution systems to water users in the state through water management committees, but very few villages have come forward to do this. This would result in transferring and creating a sense of ownership among the villagers. It was also felt that there should be a Water Act to curb water thefts and punish the offenders.

Mr. Pradeep Kumar, the Executive Engineer in-charge of Sultanpur then suggested that as a follow-up to the local stakeholders meeting that was organized in the village; he has already placed an order for replacing of the existing pipes with D.I. pipes, which has been approved. In due course, this would be executed and through a village level meeting, a plan for forming a water management committee could be developed in consultation with the community and finally handing over the water distribution infrastructure to them. This would improve water distribution and create some accountability relationships between water users and service providers.

The meeting ended with a round of circulation of cards on which the participants scribbled their major learning. For most participants, the major takeaway was the need for more effective communication between water users and service providers. That through organized dialogue we could reach some consensus and direction on way forward had just been demonstrated, in contrast to the role play that had been done a few hours ago.



Dr. Anjal Prakash and Dr. Vishal Narain interacting with Mr. Pradeep Kumar, Executive Engineer, Gurgaon.

#### Annexure 1: List of Participants

Sr. No.	Name	Designation	Name of Office
1	R.K. Mongia	JE	PHED Gurgaon
2	Amod Gupta	SDE	PHED Gurgaon
3	O. P. Boora	JE	PHED Faridabad
4	Vinod Kumar	JE	PHED Faridabad
5	Sukhbir Singh	JE	PHED Faridabad
6	Ved Prakash	JE	PHED Faridabad
7	R. C. Tanwar	JE	PHED Sohna
8	Rajan Grover	JE	PHED Gurgaon
9	Jamshed Ahmed	JE	PHED Gurgaon
10	Ajay Kangra	JE	PHED Gurgaon
11	Vijay Kumar	JE	PHED Gurgaon
12	Ajay Kumar Jindal	JE	PHED Faridabad
13	Prem Singh Singhal	SDE	PHED Sohna
14	Bhupender Sharma	JE	PHED Gurgaon
15	Anil Kumar	JE	PHED Gurgaon
16	Ram Kumar	JE	PHED Gurgaon
17	Narender Singh	JE	PHED Sohna
18	Vinod Kumar	JE	PHED Faridabad
19	Om Prakash Tanwar	JE	PHED Gurgaon
20	Khurshid Ahmed	JE	PHED Sohna
21	Jamshed Ahmed	JE	PHED Sohna
22	Mr. Pradeep Kumar	EE	PHED Gurgaon
23	R. K. Garg	EE	PHED Sohna
24	Dr. Anjal Prakash	Executive Director	SaciWATERs
25	Dr. Vishal Narain	Associate Professor	Management Development Institute (MDI)
26	Sreoshi Singh	Research Fellow	SaciWATERs
27	Pranay Ranjan	Research Associate	SaciWATERs

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