

## Reviewed Paper

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## SUSTAINABLE DEVELOPMENT OF WATER RESOURCES, WATER SUPPLY AND ENVIRONMENTAL SANITATION

**Institutional Capacity Building in Rural WatSan Sector in Afghanistan***Mohammad Afzal Safi, Afghanistan*

*The gravity of the problem of rural water supply and sanitation services low coverage (water supply 18% and sanitation 8%) and high mortality rate of children under 5 years (25%, half of which is caused by waterborne diseases and poor sanitation practice) has been recognized by the government of Afghanistan in its reconstruction Program. Accordingly to increase the coverage up to 50% by end of 2008, the construction of 100 000 water points and 1000 000 sanitary latrines and conducting 2.5 million household visits were approved. The Department of Rural Water Supply, Sanitation and Hygiene Promotion RuWatSan in the structure of Ministry of Rural Rehabilitation and Development, MRRD, is engaged in a nation wide program of support for the development of basic water supply and sanitation services through the Provincial Rural Rehabilitation and Development departments, PRRDs, NGOs, and the private sector. To fulfil this huge task it is imperative to have committed and capable partners from community level down to the government staff. This will happen through the capacity building program. This paper highlights the capacity building exercise so far covered in this regard by this department; pinpoint the ups and downs on the way and possible action in the future.*

**Introduction**

EVEN though Afghanistan has emerged from two decades of conflict, it would take decades to remedy the damage inflicted upon its physical infrastructure and social institutions. The population of the country is estimated to be 24 million people out of which 18 million are living in the rural area. Since March 2002 nearly 4 million refugees, from the countries of asylum have returned to their home in the rural areas, two and half million are still living in neighbouring countries, Pakistan and Iran, and are reluctant to return because of the absence of basic means of livelihood and infrastructures. Among these infrastructures, lack of basic water supply and adequate sanitation facilities has been one of the very serious issues encountered in the villages as the life is slowly returning to normal. According to UNICEF about 18% of the rural population has access to safe water sources and about 8% have improved sanitation facilities. Based on UNICEF study the mortality rate of children under 5 years is 25%, half of which is caused by waterborne diseases. This means that about 125 out of 1000 children die because of contaminated water or due to unhygienic situations where they live. Absence of sustainable management and skilled staff in the sector of WATSAN is another factor aggravating the problem. Intervention of aid agencies in the sector has not gone beyond the top-down, emergency and sporadic nature. Luckily the gravity of the problem has been recognized by the government of Afghanistan in its reconstruction Program. In view of this scenario, Ministry of Rural Rehabilitation and Development, MRRD was assigned to develop a policy framework and implementation strategy through which the sector moved from sporadic interventions

to a sector-wide problem-solving approach. In the light of the new policy, MRRD plays the role of planner, fund raiser, facilitator, coordinator, monitor and evaluator, while private construction companies play the role of implementing the hardware part and NGOs, the software part of the projects. The following 5 year-targets for all actors who are engaged in this sector have been set, viz.,

1. Construction of 100000 new water points.
2. 2.5 million household visits to convey hygiene messages.
3. 1 million household latrines to be built.
4. Capacity building of all stakeholders from community to the government and private sector and NGOs.

To fulfil this huge task it is imperative to have committed and capable partners from community level down to the government staff. Improvement of this situation will happen through the 4 target above. Only through the capacity building, in respect of technical, management, administration and social aspect, of all WATSAN stakeholders, we can move from felt-demand to demand-led situation and thus ensure ownership and sustainability. This paper highlights the way so far covered in this regard by this department, pinpoint the ups and downs on the way and possible action recommended for future.

**Methodology**

The methodologies used for producing this paper were previous papers and literatures reviews and the direct observation of the author as responsible for the planning and monitoring of the capacity building workshops. The previ-

ous documents were reviewed for collecting baseline data about the capacity of local government sector staff, private construction firms and sector NGOs in technical and social aspects of WATSAN projects. The direct observations of the author includes the capacity building workshops so far held for the abovementioned stakeholders.

### Situation Analysis

Due to the low coverage of WatSan services and poor sanitation practices, the mortality rate of children U5 in Afghanistan is at an alarming level. To increase the coverage up to 50% by the end of 2008 is a huge task. Because we have to more than double the implementation capacity for development of water supplies from 10000 to 25000 water points per year. We have to visit 2.5 million households to convey the message how to change certain behaviours so as to improve their health and save lives by adapting improved hygienic practices for handling water and for personal sanitation. The task is huge because we have to increase the capacity of the construction of household latrines from 15000 today to more than 250000 per year. More importantly not only the capacity of the implementing agencies in respect of technical point of view is a major concern, but unawareness of the immediate beneficiaries of the link between poor health and bad sanitation practices led to the common perception that the construction of sanitation facilities is the job of government and NGOs. This perception led to the poor community-based operation and maintenance system and 15-20% non-functioning of existing hand pumps.

### Rural Communities

The simultaneous repatriation of returnees and international aid helped create dependency among the rural communities. On the ground, the rural water supply and sanitation services in Afghanistan has the nature of top-down approach, although new government policy outlined to change this approach to demand-led one. The hardware part of WATSAN services is represented by the construction of one water point per 25 households and three household model sanitary latrines for every water point constructed. Seldom was the replication of the model latrines seen in the field. Due to lack of institutional support arrangements, a majority of interventions proved themselves to be unsustainable. The focused effort is being made to start institutionalization, through launching pilot projects of community mobilization and hygiene promotion by sector NGOs.

### Government Staff (RuWatSan and PRRDs)

The Department of (RuWatSan) in the structure of MRRD, is engaged in a nation wide program of support for the development of basic water supply and sanitation services through the PRRDs, NGOs, and the private sector. Due to the disruptions to higher education in the public and private sector, attraction of competent employees to the UN agencies, international NGOs, or private sector, and reluctance of expat Afghans to return to the country, the present professional / technical capacity of Water and Sanitation Professionals

in Afghanistan is restricted. There is therefore a significant gap between the knowledge and experience required by the Water and Sanitation sector and the experience that exists. The technical, management and innovative capabilities of professionals and field staff require considerable support to improve. The RuWatSan and PRRDs are in an embryonic stage at present. Assuming an overall facilitation and coordination role including policy, planning and development, resource mobilization and allocation, monitoring and evaluation and information management, there is an expressed need for the enhancement of the departments capacity both at the central and provincial levels. The new government policy in WatSan sector emphasize on the real engagement of local governments in running of the projects. Little rope has been given to the local governments in this regards. The only excuse is the low capacity of the local authorities. To enhance the capacity of the staff of central and provincial departments, several modules, through a competent NGO, was developed and facilitated in 2005. The modules are: Hydrogeology, Planning, Social Organization, Surveying, Water Quality and Well Construction. Each module with its content was designed in such a way to bring together the participants knowledge and understanding with facilitated syllabus to perform their job with expected quality. For example the overall objective of the content of Well Construction Module: (hydrological cycle, ground water and wells, wells and their construction, drilling types, well hydraulics etc) has been to: broaden the participant's knowledge of the technical information necessary to construct a well that will meet technical specifications and supply sufficient good quality water for many years to come. Social Organization Module is another example. The ultimate objective of this module has been to give and share the view with participants that how important is the knowledge and wisdom of the people to be used in identifying the problem, including shortage of safe water and sanitation as a basic need, and find solution to them and practice community based well operation and maintenance systems.

### Lessons learnt as general

1. Building on the existing capacity of the participants found to be more efficient than injecting purely theoretic materials with no practical implication.
2. Training materials are to be prepared based on relevant field-based feedbacks and findings.

Training activities is acknowledged as a continual process. Every event will remind the participant the past one and forge them with his practical experiences.

### Implementing Agencies (Private Construction Firms and NGOs)

According to the government new policy in water supply and sanitation sector, the government policy shifted from implementing agency to a policy-making, planning, and regulatory body. In line with the new policy, the hardware parts of the WatSan projects are being implemented by private

construction firms while the software parts of the projects is being conducted by NGOs. Prior to the new policy nearly 90% of water supply development was conducted by NGOs while the capacity of the newly established private firms is far from to cope with the target nationwide. Thus there is an urgent need to develop the capacity of the newly established private sector with courses as required. On the other hand no systematic, with a few exceptions, community mobilization and hygiene education as an essential part of the projects was undertaken by sector NGOs. Different implementing agencies with different agenda and curricula implemented their software parts of the project. To harmonize the sector activities nationwide a standard package, both in respect of hardware and software parts, with close coordination with sector ministries and NGOs and UN has been prepared.

## Responses

To achieve the abovementioned 5 years targets there is an urgent need for a vast capacity building program for the whole spectrum of stakeholders from the participating communities to the government staff. In respect of *communities*, five pilot hygiene promotion and community mobilization projects were contracted with five different NGOs in different geographical locations with expected outputs as shown in the Table 1. To respond to the immediate need of governmental staff, *RuWatSan* and *PRRDs*, and implementing partners, *private construction firms* and *NGOs*, they were provided with totally 40 orientation courses and capacity building workshops. These workshops were conducted by a well-known consultant NGOs with applied 20 years experience in WATSAN sector in Afghanistan. USAID, UNHCR and UNICEF funded the program. The summary of the one year (December 2004 - December 2005) training activities are included in Table 2.

## Lessons learnt

### A. Government Staff

1. These events helped the provincial and central departments take part in planning, designing, monitoring and

managing WatSan projects and establishing coordination among related stakeholders. Although repeated contradiction among the progress reports submitted by IPs, PRRDs and centre were seen, joint monitoring found to be good tools to find the gap and take corrective action.

2. Although there is a long way to delegate the management, from designing to monitoring, of the project to the local authorities, the workshops is a move towards the decentralization of the program.

### B. Private Construction Companies

3. The-on-the-job training helped private sector show professionalism in producing proposals and construction works.
4. Through these events private sector management became aware of being more accountable, in respect of the quality and the quantity of the work done, to communities as the owner of the facilities rather than to government authorities.

### C. Community

An integrated systematic approach in community mobilization and hygiene promotion which was practised by one of NGOs in a pilot project in Ghazni Province, gave an outstanding result. The software component was designed for conducting baseline and follow-up surveys by 4 trained surveyors. Hygiene education was conducted by 51 trained educators. Follow-up survey is studied against baseline survey. Through the comparison of these surveys the impact and effectiveness of their work were measured. The studies suggest that this a promising approach to improve effectiveness of hygiene education programs throughout Afghanistan.

## Conclusion and Recommendations

Based on the observation and monitoring reports, the physical water and sanitation infrastructures have been prominent fixtures in the communities where they have been built. However, very little attention has been paid to building the

**Table 1. Pilot Projects Objectives and Expected Outputs**

N	Family Numbers	Objective/Purpose	Expected Outputs
1	1000	<p><b>Overall Objective</b> To improve health by reducing infant mortality rate caused by preventable waterborne diseases by increasing access to safe water points and hygienic sanitation facilities</p> <p><b>Purposes:</b> 1. Increased and applied understanding about the link between hygienic practices and child diseases and mortality among the rural families in related localities. 2. Improve method for hygiene promotion which is useful and in line with other nationwide projects.</p>	<ol style="list-style-type: none"> <li>1. Report on traditional and improved sanitation practices</li> <li>2. practical draft manual with different workshop activities for hygiene and sanitation promotion</li> </ol>
2	1000		<ol style="list-style-type: none"> <li>1. Improved Sanitation Practices of the target communities</li> <li>2. Report on KAP Survey and Follow up Survey</li> </ol>
3	5222		<p>Training of</p> <ol style="list-style-type: none"> <li>1. 20 hygiene promoters</li> <li>2. 50 Mullahs, Religious People</li> <li>3. 17 Teachers</li> <li>4. 5222 household visits</li> <li>5. in 50 mosques, persons and boys will get hygiene education</li> <li>6. in 17 schools, students will hygiene education</li> </ol>
4	7522		<p>Training of</p> <ol style="list-style-type: none"> <li>1. 20 of hygiene promoters</li> <li>2. 50 Mullahs, Religious People</li> <li>3. 17 Teachers</li> <li>4. 5222 household visits</li> <li>5. in 50 mosques, persons and boys will get hygiene education</li> <li>6. in 17 schools, students will hygiene education</li> </ol>

capacity of the communities regarding proper usage and operation of the systems or the necessary hygienic practices to achieve reductions in water-related diseases. Nearly in all, with few exception, RuWatSan interventions in Afghanistan, the mobilisation and training of the participating communities was ignored and marginalized. 5 pilot hygiene promotion projects were contracted with different national and international NGOs. It has not been easy to hunt down the progress against objectives as the changing of people's attitude through training and hygiene promotion in short time proved to be difficult. Reported progresses have been monitored regularly and the documentation of some of the organizations on papers found to be unmatched with the reality on ground. Nevertheless the result of the evaluation of one of the pilot project which was completed in May 31st suggest that in-depth multidisciplinary approach to social mobilization will improve effectiveness of hygiene education programs throughout Afghanistan. Through this approach, the IP, by their surveyors, hygiene educators and community workers searched deeply for, taking into consideration the delicacy of the social values and custom, attitude and perception of the recipients during the surveys, interviews and hygiene education sessions.

#### *Expectation From the Conference*

While water supply projects are currently being implemented on locally well-accepted technology in which community participation is the key factor, as for the sanitation component, focused effort is needed to learn much more from the regional experiences to help move from top-down approach to demand-led one. Events like the forthcoming conference will definitely help streamlining the regional rich experiences

in the delivery of community-based sustainable sanitation services.

### Abbreviations

<b>RuWatSan:</b>	Rural Water Supply, Sanitation and Hygiene Promotion.
<b>MRRD:</b>	Ministry of Rural Rehabilitation and Development.
<b>PRRD:</b>	Provincial Rural Rehabilitation and Development.
<b>M o Haj:</b>	Ministry of Religious Affairs.
<b>MoE:</b>	Ministry of Education.
<b>Muni:</b>	Municipality.

### References

- 1." Best Estimates" of social indicators for children in Afghanistan 1990-2005, Islamic Republic of Afghanistan/UNICEF, August 2005.
- 2.Rural Water Supply And Sanitation National Policy Framework, September 2004.
- 3.Rural Water Supply, Sanitation and Hygiene Promotion 5 year Development Plan (2004-2008).

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**Table 2. Capacity Building Data (Workshops Conducted in 2004- 2005)**

S/N	Title of Workshops	Number of Participants								Number of Workshops
		Ministries			RuWatSan	MRRD	PRRDs	Private Sector	NGOs	
		M Haj	MoE	Muni						
	Tube Well Construction, Social Organization, Water Quality, Surveying, Planning, Basic Hydrogeology				6	4	289	10	40	25
	Sub-total									349
	Capacity Building Workshop on Hygiene Promotion	2			12	24	83	40	86	7
	Sub-total									247
	DRRDs workshop about WatSan Policy and Strategy				1	1	22			1
	Sub-total									24
	Workshop on Kabul School Latrines and Excreta/Night Soil Management Problem		23	1						1
	Sub-total									24
	Capacity Building Workshops on Application of Water Quality Test Kits and GPS				13		60			4
	Sub-total									73
	Review workshop on MRRD-UNHCR-UNDP WATSAN funded projects				13	7	28	2		1
	Sub-total									50
	Capacity Building Workshop on Warehouse Management				3	3				1
	Sub-total									6
	<b>Grand Total</b>									<b>773</b>
										<b>40</b>