

822 BD98

# The Community Comes Forth



epn 822-BD98-15323



# **The Community Comes Forth**

*Edited by:*

**Joseph Halder**

LIBRARY IRC

PO Box 93190, 2509 AD THE HAGUE

Tel.: +31 70 30 689 80

Fax: +31 70 35 899 64

BARCODE: 15323

LO: 822 B098

**NGO FORUM**

**For Drinking Water Supply & Sanitation**

First published December 1998  
© NGO Forum for Drinking Water Supply & Sanitation

All rights reserved. No part of this publication may be reproduced or translated in any form or by any means without prior permission in writing from the publisher.

ISBN 984-31-0318-1

Study Conduction : Sanchia Nishat Chowdhury  
Mollah Amzad Hossain  
Editorial Assistance : Lubna Yasmeen  
Cover Design : Saha Dipak Kumar  
Abul Kalam  
Printing Supervision : Waresul Haque  
Computer Compose : Mazedul Hoque Prodhan

Published by:  
NGO Forum for Drinking Water Supply & Sanitation  
4/6, Block-E, Lalmatia, Dhaka-1207, Bangladesh

Printed by:  
Dana Printers

# Contents

Foreword	4
Preface	6
NGO Forum Makes It A Synergistic Effort	11
Sticks to Build A House	18
The Child is Sometimes the Father of the Man	28
Raindrops Keep Falling to Fill the Tanks and Quench the Thirst	37
VDC: Means to Holistic Progress	42
PSF Makes Filthy Pond-Water 100% Safe	48
What the People Say	52
Iron Removal Plant Becoming Popular	61
United We Stand...	65
Arsenic Turns Pump-Water into Villain or Victim?	77

## FOREWORD

The ultimate frontier of the Forum's activities is the underserved and unserved areas in terms of safe water supply, hygienic sanitation and personal hygiene. Through a country-wide network of 533 partner NGOs and CBOs the Forum extends the WatSan support services to the grassroots people. The support services consist of both hardware and software. This integrated service package is directed towards creating a sustainable development in the WatSan sector in the rural Bangladesh.

By inching its contribution in the sector the Forum has come across a markable number of positive experiences. The publication of the Booklet is NGO Forum's continuous initiative to bring some of them to light to share those with the stakeholders. This publication is an attempt to focus light on a number of experiences in the rural water supply and sanitation sector. This is just a moderate fraction of the numerous instances, which the Forum has so far come across.

The partner organizations and their implementing staff are the active comrades and shareholders in the achievements of NGO Forum. This Book becomes a documentary note of the working process, progress and the ultimate result achieved by NGO Forum in communion with its partners and the grassroots people. The rural people with their open and important views and opinions become the centre of focus in this publication.

I thank and express my gratitude to the grassroots people and partner NGOs for their valuable contribution who are the most important and inseparable part of NGO Forum's efforts. My special thanks to Ms. Sanchia Nishat Chowdhury and Mr. Mollah Amzad Hossain who employed their valuable efforts in

conducting the cases through discussion with people from different sects and in highlighting the authentic pictures. All our colleagues deserve my thanks for their untired cooperation for publishing this Book.

I believe this Book will disclose some of NGO Forum's WatSan success and philosophy to the potential stakeholders.

**S.M.A. Rashid**

Director

NGO Forum for Drinking Water Supply & Sanitation

## PREFACE

Water and Sanitation (WatSan) is a very important sector in the development arena. In the grim WatSan scenario of Bangladesh, the need for development in this sector is still a priority area as regards the overall development of the country.

NGO Forum as the apex networking organization of the implementing NGOs and CBOs in WatSan sector extends its all out effort to play a very effective role in ensuring sustainable development in the WatSan sector.

The grassroots people at the same time are beneficiaries and also co-actors in the development arena. Their views opinions, range of acceptance and perception are therefore very important and of great importance. This Book attempts to accumulate a handful of instances in the rural WatSan sector. This is an attempt to acknowledge the concerted experience and perception of the development initiatives among the beneficiaries and implementing organizations in the WatSan sector. What people say and think have been considered with due importance and highlighted accordingly in this Book.

Partnership and networking approach is the functional media of NGO Forum. The support services of NGO Forum are provided in terms of software and hardware to its partners to implement WatSan activities at the grassroots, the ultimate beneficiaries. The harmonious balance between the hardware and software supports has been effective to bring a sustainable change in the WatSan scenario and in a broader sense to the overall lifestyle and standard of the rural community. This Book reflects this fact in different stories.



NGO Forum is very much committed to its vision that all people use hygienic latrines and safe water for all purposes as well as maintain a hygiene practice. The software supports of the Forum include a number of activities. Among them formation of different committees at the community level and organizing discussion forums, meetings with different community groups have been proved very effective in bringing forth much improvement in the WatSan sector. Different types of training programmes of the Forum are extended for human resource development and technical skill development. The resource service and extensive information in the form of WatSan Data Bank, WatSan NGO Directory, publications of newsletter and booklets, etc. are meant to serve not only the partners but also the non-partner stakeholders. NGO Forum is aware of the need to reach all classes of people ranging from the ultimate beneficiaries to the policy-makers. Therefore networking and advocacy activities are also facilitated and mass media is used with the intention to propel a mass support for the smooth and dynamic implementation of the WatSan programme.

The hardware support of NGO Forum is provided through the partner organizations to the community in the forms of physical materials and infrastructure. Installation of various water points for safe water coverage and supplying low-cost sanitary latrine through the Village Sanitation Centres for sanitation coverage are two key components of the integrated WatSan approach of NGO Forum. The goal of NGO Forum is helping the nation achieving 100% WatSan coverage. The mechanism has been highlighted in detailed in some cases.

In the country's current hydrogeological condition the gradual declining of the groundwater table has become a threat. The presence of iron, salinity or arsenic is also no less a threat for the nation. Therefore different technological option for safe

water for the community people are considered with due importance by NGO Forum. As a result Rain Water Harvesting System (RWHS), Pond Sand Filter (PSF) or Iron Removal Plant (IRP) – all these technological options for the much popular handpumps are provided to the community with the hope of popularizing those, and thus mitigate the current problems in the water supply area and ensure safer water for people. The presence of arsenic in water is a burning question of today threatening the lives of about fifty millions of people. NGO Forum has taken the issue very seriously and incorporated the possible options with its activities.

Throughout its nation-wide networking areas, the Forum has come across a variety of experiences. To convey its share to the potential readers we effort to accumulate only a few of those in this collection, since it is impossible to collect those all. The experience of the Forum glows with the touch of the colour of the views, experiences and opinions of the grassroots people and also the partners.

My thanks and gratitude are extended to all those who helped in bringing together the different instances by picking them up from different corners of the country. I would also like to extend my gratitude and thanks to my colleagues who have contributed a lot to make this Book published.

Our efforts will be satisfied if this Book proves to be of any worth to its potential readers.

**Joseph Halder**  
December 1998, Dhaka





## **NGO Forum Makes It A Synergistic Effort**

**T**he primary focus of NGO Forum's philosophy is that to support implementation of water and sanitation (WatSan) programmes through an integrated approach. NGO Forum is the only WatSan organization in Bangladesh, i.e. the only NGO to work exclusively with the supply of safe water and sanitation. In this regard, however, it does not work directly with the grassroots people unlike other organizations, but depends on, and collaborates with its extensive network of 533 partner NGOs, other NGOs, the Government, donors, and other organizations, to disseminate and implement the information and technology. In its role as the "apex" body, NGO Forum strives for effective co-ordination among the partner organizations as well as the formulation of favourable sectoral policy environment, needs analysis, planning, management, programme formulation, implementation, and development assessment. NGO Forum assumes that by facilitating strong advocacy and information services, and establishing a collaborative network at the local, national and international levels, it will be better able reach its goal of supporting the WatSan sector, and motivating all people use hygienic latrine and safe water for all purposes.

In its association with its partner NGOs, the Forum's role is to support and help in building their capacity, thereby, creating an environment where it is possible to ensure smooth promotion of safe water and sanitation. It provides not only financial help, but also, both hardware and software support in water supply and sanitation programmes. In addition, training support in the human resource and skills development area on WatSan issues is provided to the partners, the community people, as well as the tailor-made courses to the non-partner NGOs. To make the

network more effective the Forum conducts need assessment meetings, workshops, seminars, and also undertakes the distribution of communication materials such as, newsletters, different type of reports, brochures, etc. The Forum has 533 partner NGOs working directly at the village community level. However, there are many more NGOs not affiliated with the Forum, and millions more people spread throughout the country. The Forum attempts to collaborate with the various NGOs and the government to eliminate the discrepancy in programme implementing strategies, and ensure the fastest distribution of safe water and sanitation. Here again, the advocacy role of the Forum comes into play strengthening the communication and networking system among the various sectoral and trans-sectoral organizations.

The nature of NGO Forum's WatSan programme is such that there are no financial benefits for the implementers. Continuous motivation, promotional activities, and the like are required to ensure maximum coverage. The Forum works together with the government, policy makers, and other donor agencies to formulate policies regarding the safe water and sanitation situation in the country. For smooth implementation of the WatSan programme, the Forum collaborates at the local administration level with the government agencies, in the hope of creating a more favourable environment for work. In attempting to materialize its vision of reaching all through its WatSan programme, the Forum must advocate both locally and centrally for a single formulated strategy that will be practised by all the sectors, and thus eliminate the obstacles brought about by the separate methods.

In its endeavour to extend the reach of its safe water and sanitation programme, NGO Forum is also attempting to draw in and involve the local opinion leaders, and indigenous groups in the communities, advocating the spread of safe water and



**National Workshop  
on  
Searching for a Common Strategy for  
Sharing In Sr. 'lon Programme**

Venue : BRAC Centre, Dhaka  
Date : February 23, 1998

Original  
for Drink  
**Apply & Sanitaflo**

hygiene practices. In this undertaking they are involving members of the community such as the school teachers, parents, religious leaders, private producers, as well as the community leaders and union WatSan committees to motivate the community to follow the directives of the NGOs working in this respect. These practically reach the more conservative community, those who the Forum is unable to reach even with the help of its partners.

The Forum feels the need to embrace the situation using all available approaches. It thus lobbies with the legislators to pass laws promoting hygienic practices. The media in this instance is brought in so as to propel a mass support for the work of the WatSan programme, and reach all the regions and people in the country. It is hoped that policy-makers can be reached using different media such as radio, television, newspapers, magazines, etc., so as to influence their opinions and decisions and commandeer their help in promoting the WatSan programme. Various media is also used in the attempt to reach the village community, to disseminate information about the WatSan programmes, and reach rural folk all over Bangladesh. A special 2-day training workshop for journalists in each of the 12 NGO Forum regions is implemented to familiarize them with the WatSan programme, i.e. implementation strategy, coverage, success, problems, and other related issues. The intent of this initiative is to promote communication and urge a form of commitment from the journalists, and through their writings, work towards improved hygiene and sanitation in the country. The reporters also visited the fields and different programmes, and reported on their findings. This effort was deemed successful not only because of the people reached through the readership, but also as a means of advocacy via the publications, keeping the public in contact with the Forum's work.



विद्यार्थसंगीत संस्थान, दिल्ली का प्रतिष्ठित संगीतज्ञ श्री. सुरेशचंद्र हस्तिनाजी जी  
श्री. सुरेशचंद्र हस्तिनाजी जी

आयोजित: आयोजिकांक ३१-२०, ०२-७१

आयोजित: आयोजिकांक ३१-२०, ०२-७१

आयोजित: आयोजिकांक ३१-२०, ०२-७१

आयोजित: आयोजिकांक ३१-२०, ०२-७१

आयोजित: आयोजिकांक ३१-२०, ०२-७१

आयोजित: आयोजिकांक ३१-२०, ०२-७१

आयोजित: आयोजिकांक ३१-२०, ०२-७१

आयोजित: आयोजिकांक ३१-२०, ०२-७१

आयोजित: आयोजिकांक ३१-२०, ०२-७१

आयोजित: आयोजिकांक ३१-२०, ०२-७१

आयोजित: आयोजिकांक ३१-२०, ०२-७१

आयोजित: आयोजिकांक ३१-२०, ०२-७१

आयोजित: आयोजिकांक ३१-२०, ०२-७१

आयोजित: आयोजिकांक ३१-२०, ०२-७१

In addition to all this, the Forum in its advocating and networking role maintains an extensive data bank cataloguing the work of all its partners and collaborators so as to facilitate communication between them. The partners, and all other organization working in this capacity can also avail themselves of a WatSan NGO Directory providing all necessary WatSan information, and a resource centre on the NGO Forum premises, both of which are maintained by NGO Forum. Audio-visual media is also used as a means of information dissemination.

A specialist in this field Mr. Khodabox, Assistant Chief Engineer at DPHE, maintains that organization NGO Forum is the only apex and networking organization in the WatSan sector that has already established a training network through which it is providing training to the NGOs. DPHE itself being the government organization, is also taking training facilities from NGO Forum. NGO Forum has successfully established a training network through which it has enough scope to develop training personnel with multi-faceted dimension. He appreciates NGO Forum's initiative in developing innovative and creative communication materials. Organizations like DPHE & UNICEF have also been using NGO Forum's communication materials for various purposes. NGO Forum also maintains close contact with sectoral stakeholders like DPHE, UNICEF, UNDP-World Bank etc. through different meetings, seminars, workshops both at central and regional level.

Engr. Mohammad Mofazzal Hoque, a National Field Programme Officer from the World Health Organization, stresses the coordination and collaboration role that NGO Forum maintains with the sectoral organizations. World Health Organization (WHO) is implementing a Community Water Supply Project in collaboration with Department of Public Health Engineering (DPHE). NGO Forum also collaborates with WHO in order to build up its capacity as well as its partner

organizations. He also finds the issue-based seminars, workshops, and meetings arranged by NGO Forum to help the participants get updated on the current on WatSan information very interesting. Mr. Hoque considers the functional structure and organizational structure of the Forum well set to play its apex role. The communication networking service is well represented. He believes that close collaboration and cooperation among sectoral stakeholders and sector professionals will help strengthen the apex-networking role of NGO Forum as the coordinating agency in the WatSan sector.



## Sticks to Build A House

In working towards a nation-wide improved safe water and sanitation system, one of the main roles played by NGO Forum is that of building the capacity of its partner NGOs. Since the Forum itself is not directly involved in implementing the technology at the grassroots level, and depends on its partners to fulfil this function, NGO Forum chiefly plays an advocating and networking role. Through collaboration with its partner NGOs, the Forum endeavours to communicate with the various cross-sections of people. The Forum assists its partners in a number of ways, believing that such a networking and advocating role will go further towards the progress and achievement of its goals, than a straightforward direct role of implementation at the local level.

The majority of the 533 partners of the Forum are modest NGOs, working in selected regions, on a relatively small scale. Many of these were initially assisted by the Forum, which adopts a different, more relaxed attitude in deciding which organization should receive its support. All organizations must however, fulfil the following criteria –

1. They must be registered at the NGO Affairs Bureau.
2. They must be a member of the Association of Development Agencies in Bangladesh (ADAB).
3. They must deal with safe water and sanitation either directly or indirectly along with their other programmes.

One such partner of NGO Forum is the Samajkallyan-O-Palli Unnayan Sangstha (Society and Village Development Organization), or SPUS as it is known, which operates

development programme in the Rupsha and Malochi villages in Manikganj. SPUS initially began in 1961 as a recreational club, engaging in activities such as soccer, badminton, drama, plays, etc. The management of SPUS has been handed down the generations to its present managers who took over the reins in 1980. In 1981, ADAB was formed in Manikganj, and SPUS thus, came into contact with NGO Forum which was then working under the ADAB banner. Swapan Kumar Chandra, the Programme Officer for SPUS firmly believes that if SPUS had not gone into social work when it did, it would not have survived this long.

Through 1982-1988, SPUS worked with ADAB in the community forming their own beneficiary groups, and participating in various training programmes such as group management, livestock management, health and related issues, etc. Up till this time, SPUS did not have much direct contact with NGO Forum under its own name. Then in 1988, SPUS received 20 tube-wells for community distribution from the Forum and that paved the way for the future. It is hard to believe that 20 tube-wells could go such a long way, but it did. Mr. Chandra admits to having a hard time in reaching the groups they initially tried to form. There had been another group previously working there, who had demoralized the village people, and they were now sceptical of SPUS. They were reluctant to entrust their money to the group fund, dubious of its intentions.

The 20 tube-wells given to the groups went a long way in gaining their trust. They now believed that if this NGO could give them the tube-wells, they might also be able to help them in other ways. This further propelled group formation, and brought the community together. The receipt of the tube-wells also launched a demand for more tube-wells. This windfall

# গ্রামীন সেনিটেশন কেন্দ্র

সহযোগিতায় - এন.জি.ও. ফোরাম

রিশিল্পী ডেভেলপমেন্ট প্রজেক্টস

গ্রাম-গোপীনাথপুর, ডাকঘর-বিলেরপোতা  
সাতক্ষীরা - ৯৪০০।

স্থলি

ability to communicate with the group also helped SPUS undertake its other social work and mobilization activities.

NGOs initially receive Forum support of Tk. 50,000 to set up a village sanitation centre (VSC). These must produce and sell sanitation equipment at cost plus depreciation price to the community people in villages around the country. The sanitation centres must produce 50 latrine sets per month in an average as per their agreement with NGO Forum. The centres use the initial funding as a revolving fund, making and selling sanitation equipment. In addition to producing quality low-cost equipment, they also provide information about hygiene and sanitation related issues to the village people. NGO Forum further assists by providing material support as well as water supply hardware such as tube-wells, pumps, etc. to the partner NGOs.

SPUS had in the beginning approached NGO Forum to assist them in sanitation work. At that time the village coverage in this respect was a meagre 2-5%. NGO Forum conducted its need assessment survey, and in 1989, it allocated Tk. 45,000 for the use of SPUS in building a village sanitation centre in Rupsha village. In 1995, SPUS received a further Tk. 50,000 to set up a second VSC in the Malochi village of Manikganj.

After the establishment of the VSCs, village sanitation coverage rose to 80%, and has considerably lessened the diarrhoea related diseases. Mr. Chandra hopes that the coverage will increase to over 90% very soon. The cost of the sanitation equipment is bought at cost by the village people. Also since 1988, 130 tube-wells have been distributed to the community people, approximately 55 people to a tube-well. The distribution of the tube-wells occurs after need assessment at the local level, site assessment, and after a caretaker for the tube-well is determined. Half the cost of the tube-well and its installation is

borne by the community, with the installation costs being the community's responsibility. Even after this initial selection, NGO Forum visits the selected site, and if all is satisfactory, the installation of the tube-well is sanctioned.

This strategy of providing initial funding is a crucial role played by the Forum, for most donors will only give funding to those NGOs who are already engaged in some sort of development work, and are successful. This preliminary funding by the Forum assists the small NGOs in the initial setting up of their organization, and enables them to receive additional funding from donors for other work. SPUS received funding from Asian Partnership for Human Development (APHD) through their agent Caritas, after the donor saw their women development programme. Moreover, they have also since received funding from donors such as Palli Karma Sahayak Foundation (PKSF) and Centre for Disability Development (CDD). SPUS feels that NGO Forum played the key role by setting up their foundation which is responsible for their receiving funds for different works from other donors.

NGO Forum has also instituted a number of training programmes which benefit not only the partners, but also their beneficiaries, and other organizations. The sessions conducted both centrally and locally, focus on human resource and skill development. The Forum has a well equipped Training Centre near its Central Office.

A major component in this human resource development training is the Training of Trainers, abbreviated TOT, which is essentially a programme to instruct the participants in WatSan training mechanisms. In addition, they are taught the skills necessary to conduct and design other effective training programmes. These groups in turn conduct their own training activities in the community level, such as the Caretakers





training on water technologies, etc. Mr. Chandra of SPUS admits that TOT has been a big help to him, enabling him to conduct other training programmes funded by other donors. He has designed and conducted a number of training courses, as well as a few regular workshops. Because of the receiving of TOT he himself was able to conduct these workshops, and this meant he was able to highlight the community's needs and demands. Where outside trainers would not be able to relate personally to the courses, Mr. Chandra was able to, because of his personal involvement with the groups.

NGO Forum facilitates a number of training programmes for human resource development. Training programmes such as Community & Social Mobilization for WatSan, WatSan Programme Management, Village Sanitation Centre Accounts Management, Communication & Motivation for WatSan, Popular Folk Media for WatSan campaign, WatSan Programme Orientation Techniques for Different Groups, and others, are among the courses currently on the Forum's agenda. The VSC Accounts Management course, for example, helps the partner NGOs not only to manage the accounts of the VSC, but also the accounts of their other activities. The human development training programmes are geared to help the partners be more knowledgeable about community and social mobilization concepts, effective WatSan management, and all in all, be better equipped to communicate with, and carry out the motivational efforts required for community development and WatSan management.

NGO Forum has also instituted a number of technical skills development training courses designed to meet the need of the beneficiaries that the partner NGOs are dealing with. The training course on Tube-well Sinking teaches the participants about tube-well boring, installation, and repairing. After completion of the course, the participants, who are community

people or tube-well mechanics uninstructed in tube-well technologies, are able to take this up as a profession if needed. The course on Low-cost Latrine Production teaches the group members of partner organizations to produce different types of low-cost appropriate hygienic latrines for the rural people, as well as produce, install, and maintain different types of latrine technologies. Another training course, the Pump Caretakers Training provides the participants of the course, who are usually women who eventually look after the pumps, technical knowledge and skill on the Tara pump, together with problem identification and solution, its repair and maintenance.

The participants for the training sessions are selected and sent by the partner NGOs, and are provided free of cost by NGO Forum to participants of these courses. Gono Kallyan Trust, GKT Project Manager, Mr. Dharendra Kumar Ray states that NGO Forum's training programmes have greatly benefited their organization. The trained personnel can be used as resource persons for future training activities. Training of Trainers has met the lack of such trained personnel, and enabled GKT to conduct their own training programmes. They have attended two separate training programmes conducted by NGO Forum. One on social mobilization on water and sanitation, and the other, the TOT training. The participants have consequently trained other people. The training facilities, he says, have not only helped in water supply and sanitation programmes, but also in GKT's other integrated development work in about 32 separate components.

NGO Forum believes that its participatory approach is responsible for its success in the safe water and sanitation field. Its networking reaches to and encompasses the government organizations, donors, and other non-government organizations, to create a favourable and mutually beneficial working environment. The Forum utilizes the partner NGOs to associate



and network with the local power structures, arrange meetings and so forth. The central NGO Forum networks with the Dhaka Department of Public Health Engineering (DPHE) to communicate with the DPHEs of the other regions. The foresight is that the building of such a relationship with the different power structures will facilitate work, research, information, implementation, etc. in all areas of water supply and sanitation.

Furthermore, NGO Forum maintains an extensive information and resource service which is available to the partner NGOs as and when needed. The WatSan Data Bank and WatSan NGO Directory catalogues all information relating to all the partner NGOs, other related water supply and sanitation issues, and the information are regularly disseminated to its partners and stakeholders. There is also a Library facility on the NGO Forum premises, which stocks books, journals, newspapers, newsletters, etc., as well as audio-visual material. Every quarter, information about additions to the Library are passed on to the partners via the Forum's 12 Regional Offices so that they are also aware of the material available should they require them. The Forum also publishes monthly and quarterly newsletters, booklets, etc. to keep its partners updated about its activities, developments, etc. The maintenance of such an information system and data bank is intended to assist the partners in their work, as well as to facilitate smoother and more effective communication among them.

NGO Forum does in essence provide the small NGOs with the building blocks on which to base their organization. This capacity building role is crucial to the work and development of the partners. Even after the partners are well on their way, NGO Forum maintains contact with them, overlooking their activities, lending a helping hand when necessary. Although the Forum is concerned with those organizations involved in water supply and sanitation, its facilities are open to all interested parties who care to avail them with a view to capacitating those to contribute in the nation's WatSan promotion.

## **The Child is Sometimes the Father of the Man**

“**B**reak open latrines, Build hygienic latrines!” This was the battle cry of the procession making itself through the Sakhua village in Trishal under Mymensingh district. Students, teachers, village development committee members, school authorities, all, participated in this rally in an attempt to spread safe water and sanitation awareness. The rally was a festive occasion. Students felt more like they were in some sort of a carnival, getting a day off school, then a lectureship on hygiene. The rally concluded the one day School WatSan Programme in the Sakhua High School in Sakhua, Mymensingh.

The school programme in Sakhua took place in May 1997. Prior to that event, 18 teachers from different schools participated in a Teachers’ Orientation. The headmaster of Sakhua High School, Abdus Salam was one of the participants in this Orientation. The agenda included the school programme strategy, the importance of safe water and hygienic latrine use, and the importance of personal hygiene. It also highlighted NGO Forum’s various software activities at the field level, and enumerated the ways in which the school programme can be successfully conducted. This initiative was an attempt at obtaining the commitment of the teachers to work for the school programme.

The regional officers of NGO Forum together with the help of its partner NGO, Nayan Action Foundation (NAF), and the village development committee members, conducted the one day school programme in Sakhua High School. NGO Forum’s objective in conducting the school programme is to reach the children, to motivate them, and through them, convince the parents to install hygienic latrines and safe water technologies.



It is felt, that parents are more inclined to listen to their children. These children can also motivate their neighbours, and the surrounding villagers. Sometimes, older children can also help in the installation of sanitary latrines, and safe water technologies, where the owner is unable to do so. If the children are aware of such hygiene matters, the school environment is also cleaner, and the relevant school authorities are also compelled to provide access to safe water, hygienic latrines, etc. The Forum cooperates with partner organizations, teachers, union council representatives, and parents, to form a School Committee. This Committee is responsible for ensuring that the teachers of the different school reinforce hygiene education on a regular basis, and conduct regular follow-ups.

The students of Sakhua High School were previously informed about the WatSan programme, and given the day off from classes, although all were expected to attend the programme. There, they were told about the advantages of safe water and hygienic latrine use, and the disadvantages of open latrines, and unsafe water, such as the diseases spread, etc. A video was also shown to them to further illustrate the WatSan ideal.

Shefali Akhter is a Class 9 student of Sakhua High School. She says that in the beginning she was unaware of the consequences of using open latrines, and only knew about it after attending the school programme. She tried to talk to her parents afterwards, but they refused to listen. Finally, she talked to her headmaster about her inability to convince her parents to install a hygienic latrine system. Mr. Salam accompanied her to her house, and together they talked to her parents, and finally managed to persuade them to do something about the situation.

Nasreen Sultana is another student of Sakhua High School. She claims they had a sanitary latrine even before the school programme, and her family were habituated to using it.



However, till attending the school programme she was unaware of the reasons for using a hygienic latrine. They also have a tube-well, which they use for safe water, although that is because there is no other way of obtaining water as there are no ponds, etc. nearby. It is only after attending the school programme that she became aware of the importance of safe water and sanitation use. Nasreen also talks about two of her friends Lucky and Asma, who were unable to convince their parents to install hygienic latrines, because they were poor. In the end, however, the three of them were able to convince their parents to install the latrines, while the school authority and the village development committee helped them with the cost.

Masudul Alam a student of Class 10, agrees that the school programme has been very beneficial as far as safe water and latrine use is concerned. In this, they are also motivated by the teachers who conduct regular follow-ups. “The members of the village development committee have a close relationship with the teachers. The mobile village sanitation centre is located right next to our school, in the Union Parishad premises. Sometimes, the committee members will come by the school and enquire about the sanitation affairs, who are covered and who are not, etc. They also try to motivate the parents through the children”.

The headmaster, Abdus Salam, together with other teachers, and NAF staff members, conducted a survey to obtain information about the village sanitation coverage. Before the school programme, of the 600 families in the village, only about 20-25% were covered. After the school programme, they assume the coverage to be closer to 75-80%. The teachers also follow-up on the students progress, and regularly visit families to ensure that everyone is eventually covered. He says that the coverage was less before the programme because of poverty as well as illiteracy on the subject. At the same time, the safe water

coverage was 100% even before the school programme, because the villagers have no other source of water except for the tube-wells. But now, “the people don’t go to the bushes anymore to defecate, and they drink safe water, because they know what happens if they don’t”.

Shahan Chandra Shil, the headmaster of Hamidullah Hat High School, in Shitakundo, Chittagong, says that “Sanitation, and personal hygiene are issues which are taught during assembly every day”. The school is equipped with a tube-well for safe water, and hygienic latrines. Young Power in Social Action or YPSA was the local NGO, conducting the school programme in this region. The response, attendance, and participation during the school programme was great, Mr. Shil observes. He believes that “NGOs working in the villages are very effective, and do a good job of making people aware of health and hygiene issues. Even the children are aware of this”. Abu Taher, a school teacher, attended a teacher’s orientation in Noakhali, and subsequently assisted YPSA in conducting the school WatSan programme which followed. The feedback from the students was favourable. A few students even came to the headmaster right after the school to enquire about latrines. They were sold hygienic latrines from the village sanitation centre at YPSA, who even transported them free of cost. “Most of the people in this region are poor, and many are unable to buy the hygienic latrines even if they have the desire. If we are able to provide the poorer students with latrines free of cost, that would be a great help”, Mr. Shil suggests. “Also, the ring from the ring slab latrine falls off after 1-2 years, and requires a mason to fix it, which is expensive. The people do not have the money for this”.

Another high school in Borochala village in Bhaluka under Mymensingh district has taken a novel approach to implement and further the school WatSan programme. Md. Mujibur Rahman Khan, a teacher of this school explains their initiative.

The school WatSan programme was conducted in Shamola Taher Adarsha Girls' High School in 1996. Soon after this, the teachers and students jointly took the initiative to set up two separate committees to oversee the WatSan impact. One of these is the Class WatSan Committee. Each class has a Class WatSan Committee which is comprised of six student members, two of whom are selected to be the captain and vice-captain. There is also a class teacher to supervise their activities. This Class Committee keeps tabs on the safe water and sanitation coverage in the village. They keep records on which families are covered, and which are not. They also attempt to motivate their classmates to learn about and install safe water and hygienic latrines. The Committee sits together every month, and reviews their monthly work. They look over how many families they have been able to bring under coverage and how many families are left. Their report is sent up to the School WatSan Committee.

The School WatSan Committee is seated by two members from the School Managing Committee, 8 teachers, and a member of the partner NGO, in this case, the Human Development Programme or HDP a partner NGO of NGO Forum. The School WatSan Committee oversees the work of the class committees, and reviews their monthly reports. They try to guide the children yet uncovered by safe water and sanitation, and motivate their parents through them. Dolena Khatoon is a Bengali teacher at this Girls' High School. She says that this system of motivating the parents through the children is the right way to ensure the effective implementation of the WatSan programme. "The Class WatSan Committee is a great mechanism to encourage the students. Prizes are given to the class committees with the best results, that is, the committees, which show the most coverage results. This instills a sense of competition among the classes which is very healthy".



Mr. Azizul Haque, a B.Sc. teacher states, that the class WatSan programme starts from Class 6. As a result, the upper classes with older students show better results, and most have installed hygienic latrines. Special emphasis is, thus, needed for the lower classes, into which new students enter, to motivate them to participate in the WatSan programme. The school is attended by students from different villages. While Boro-chala village has 100% coverage, the other villages are still not totally covered.

A school routine, produced, and distributed by NGO Forum through its partners, containing WatSan related information is also distributed to the children, says teacher Mujibur Rahman Khan. Thus, the children come into regular contact with the WatSan information contained in the routine. At regularly held cultural programmes, among the topics projected at the essay competitions, dramas, etc., WatSan issues are also highlighted. "Absenteeism has reduced because the children are less afflicted with diseases. The WatSan programme is responsible for this, because the most common disease at that time was diarrhoea, which is caused by the use of unsafe water, and unhygienic latrines. They are very indebted to HDP for their motivation, and help in instituting the various programmes in the school". He talks about a student, Khaleda Parveen who did not have a hygienic latrine in her house despite continuous pressure from her peers in the class committee. Finally, in embarrassment, she stopped coming to school. Members of the class committee together with members of the faculty visited her house and talked to her father, Khalil Pathan. After he capitulated, and a latrine was installed, Parveen returned to school.

Dolena Khatoon proposes that if a network can be established based on the different WatSan methods implemented in the different schools, it would help them to tackle the sanitation issue more dynamically. Moreover, if sanitation issues can be

addressed in the social science textbooks, along with other environmental issues, it would prove to have a greater impact on the students. Since poverty is one of the main causes, of the people's inability to buy hygienic latrines, providing the latrines at subsidized prices, or even free of cost would be a great benefit to the people. "If every community can run the School WatSan programme the same way they are running theirs, the use of unsafe water and unhygienic latrines will be thoroughly eradicated".

## **Raindrops Keep Falling to Fill the Tanks and Quench the Thirst**

**I**t was a cloudy Sunday afternoon in Srifalkathi village of Shyamnagar thana in Satkhira. Azibar Ali Dhali, comes out of his house with a large glass and stands near the water tank in his courtyard. As half the glass is filled with water, he exclaims “How sweet the water tastes!”. This is how people hail rain water, the drops of blessing from above.

Collection of rain-water or rain-water harvesting process for drinking purpose started in the coastal districts for about a year. Fifteen such plants have been set-up in Satkhira district last year with the financial support of NGO Forum, implemented by local NGOs. It is under process to set-up fifteen more plants in Satkhira and five plants in Khulna in 1998.

Such a plant stands on the courtyard of Azibar Ali Dhali, which has been set-up under the supervision of the organization “Shushilan” of Kaliganj thana under Satkhira district. Azibar and a neighbour of him named Fazila Khatun shared 25% cost for this plant. Azibar is a mason (Rajmistri) by occupation. He himself has completed the construction of this Rain-Water Harvesting Plant capable of containing 3200 litres of water in August 1997. He collected a rather small quantity of rain-water only in two months. It served for drinking purpose for the eight members of two families till last April. But two-third of the tank has been filled up with rain-water this year.

Like Azibar Ali and Fazila Khatun, Asia and Mursheda of the same village have set-up another Rain-Water Harvesting Plant under the supervision of the local NGO Shetu with the financial support of NGO Forum. This plant has been serving for the total drinking water supply for 14 members of the two families.



শ্রী রামচন্দ্র মন্ডল  
শ্রী রামচন্দ্র মন্ডল  
শ্রী রামচন্দ্র মন্ডল



Safe drinking water is a basic need for the people of Bangladesh, where there is the threat of thousands of diseases. People at all levels are involved in collecting safe drinking water - may it be the City Corporation or Municipality supply or tubewells. But where these facilities are not available, there people have to depend on ponds or lakes or open reservoirs. Not for household purposes only, but people are compelled to use this unhygienic water for drinking purpose also. This is the tragic fact for innumerable people in the coastal area. There are many areas in the coastal belt where it is impossible to collect water with a tubewell. Moreover at some places the tubewell water is too salty and full of iron to drink. But extensive work has been being done to find a suitable alternative method for drinking water supply since long. This road of success led to some exceptional works in the field of drinking water supply in the coastal belt. Iron Removal Plants have been set-up experimentally to reduce the iron level in tubewell water. Pond Sand Filters (PSF) have been set-up to purify pond or lake water. Rain-Water Harvesting Plants have been set-up to collect rain-water for drinking purpose.

Although rain-water harvesting is an age-old method in the world, but this technology is quite new in Bangladesh.

With the concerted efforts of the government and the NGOs, this technology has been introduced here only since last year. In 1997 fifteen plants have been set-up experimentally in Satkhira district with the effort of NGO Forum in partnership with its partner NGOs and twenty more plants are under process to be set-up in Satkhira and Khulna districts. The construction cost for a Rain-Water Harvesting Plant which has the capacity of containing 3100 litres of water ranges from eight thousand five hundred to nine thousand Taka. The beneficiary family shares 25% cost of construction. The rest 75% cost is supplied by NGO Forum through its local partner NGO. Although, rain-

water harvesting is a new technology, but it has achieved much popularity among the people of the coastal areas, for whom scarcity of drinking water has been an unavoidable hard reality. Karunamoyee Saha, Arun, Dipen, Ratan, Mariam and some others of Kaliganj and Shyamnagar thanas of Satkhira district express their willingness to share 25% construction cost to be the lucky and proud owners of Rain-Water Harvesting Plants.

Mintu, a staff of the local NGO “Shushilan” believes that it is possible to create a wide network of Rain-water Harvesting Plants throughout the entire coastal region if government and other large NGOs provide necessary financial support in this connection. It will solve the problem of getting safe drinking water for the coastal people.

So far it is known, the age-old Rain-Water Harvesting process was first started in Egypt. Immediate afterwards this technique started being used throughout Africa. According to the researchers, the collection of rain-water and its use was started in the world about 2000 years ago and it is still going on. Reservoirs of different capacity are available in different parts of the world ranging from 200 to 2000 cubic metres. In Thailand 60% of the total demand of drinking water is fulfilled with rain water. There, this project is a widely accepted one. The largest reservoir of rain-water is found in Istanbul of Turkey. Its capacity is 80,000 cubic metres.

People in the coastal areas and hilly areas of Bangladesh have been collecting and using rain-water since long. But this water was collected unhygienically in large earthen vessels. This habit of people led to the improved version of collection of Rain-Water Harvesting Plant of today. It is very easy to construct a plant. The size of the tank should depend upon the number of the family members.

The cost of a tank ranges from three thousand to nine thousand Taka. According to the researchers, 2 litres of drinking water is necessary for a man everyday. Therefore, a plant with the capacity of 3200 litres can serve 10/12 persons, a plant with the capacity of 2000 litres can serve 7 persons and a plant with the capacity of 1000 litres can serve  $\frac{3}{4}$  persons for five months. In the rainy seasons both collection and use of water can go on side by side.

The collection and preservation is very easy. At first a concrete reservoir has to be constructed. Above it, there'll be a thick catchment pipe, which will carry water from the tarpoline or tin roof of the house to the tank. At the bottom end of the tank, there will be a tap to get water from it. Since the tank is made of ferocement, there's no chance of formation of bacteria. So water will be safe throughout the year. But, the tank must be cleaned once a year.

Those who are concerned about this work think that, if government starts to install Rain-Water Harvesting Plants like tubewells throughout the country, especially in the coastal areas, it will solve the drinking water supply problem entirely. Moreover, the installation of this plants in those areas where the tubewell water is arsenic contaminated, can help solve the drinking water supply problem. But in this case it will require more attention from the government. Because, a tubewell can supply necessary water for all purposes for 10 families, whereas a Rain-Water Harvesting Plant with the current technology can supply only the drinking water for two families. But that is a tremendous getting for the people of coastal belt where tubewell or any other pump technologies is of no use for meeting their demand up of sweet and safe water.

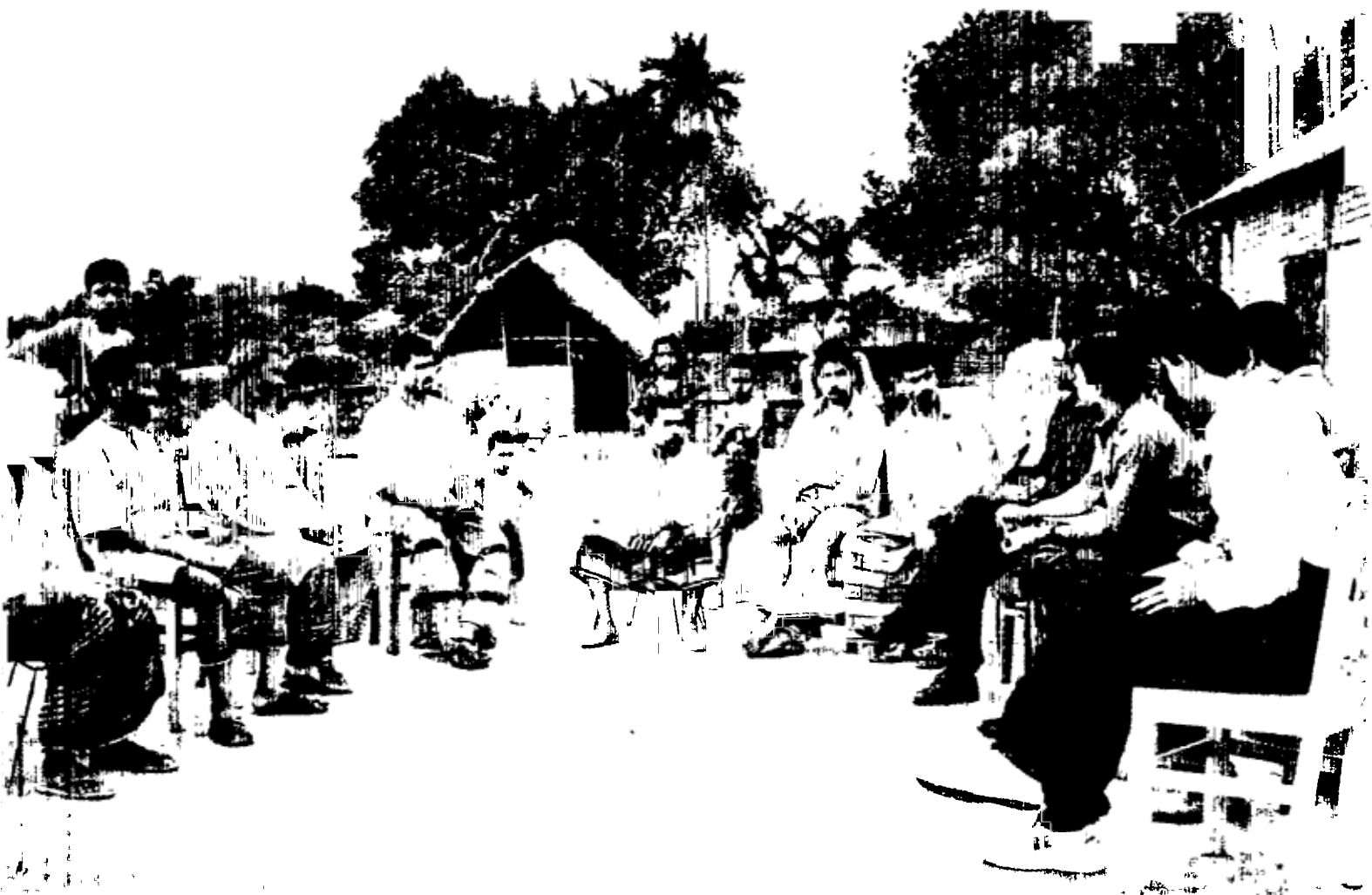
The coastal people are even interested to share the construction cost in this regard.

## VDC: Means to Holistic Progress

“Where there’s a Will, there’s a Way”. The Village Development Committee was established in September 1997. By December 1997, they had achieved almost 100% sanitation coverage in the village. 120 out of the 141 families had water seal latrines installed. By the end of January next year, the needs of the remaining 21 families were met, and 6 tube-wells were installed so that they had access to safe water. In only four short months, the committee had reached their target and established their vital role in village development.

Palli Unnayan Parishad, or PUP is a partner NGO of NGO Forum working in the Pahankucha village of Comilla. One of their main accomplishments in this village, with regards to community participation was their help in the establishment of the village development committee or VDC. After talks with PUP, members of the community, 11 men and 4 women, gathered to form a VDC in the month of September, 1997. With help and advice from PUP, the VDC conducted a survey to ascertain the situation in the village with regards to water supply and sanitation. Based on the information gleaned, the village was divided into two parts, and the VDC set the target date for 100% coverage for December 1997.

The Village Development Committee was a NGO Forum concept, responsible for the overall development of the village, dealing with activities relating to planning, promotion, follow-up, and monitoring of health development programme, education programme, income generating programme, afforestation and environment development programme, as well as the collection of socio-economic information, etc. The idea behind the establishment of a VDC was that such a committee, being better able to relate to the grassroots level, would be



much more effective in implementing the Forum's WatSan programme through community management. The VDC emphasizes WatSan promotion, and takes the necessary steps to ensure the purchase, installation, and appropriate use of sanitary latrines by all families in the village. The VDC is also responsible for maintaining contact with the latrine suppliers, and ensuring adequate supply. The VDC is formed through mutual discussion and understanding with the people in the Local Discussion Forum. The Committee is then formed with 11-15 members, and is represented by members from the local power structure, as well as different levels of the community, including women. An officer from the local partner NGO working in the village, works as the member-secretary of the VDC.

The people in Pahankucha had no previous guidelines for ways to improve their situation. They wanted a better life, but had no means to go about it. PUP gave the VDC guidelines for working towards a better future. They were told about family planning, adult literacy, safe water and sanitation, etc. PUP helped by providing sanitary equipment at reasonable prices, and which would have cost a lot more if bought from private producers. They have received credit from PUP, as well as information about health, and other issues. All decisions and projects broached by the VDC, are taken with the help and advice of the PUP officers. It was seen that once the VDC worked in conjunction with the partner NGO, the village participation was greater, and PUP in this instance was able to greater motivate the community for the implementation of NGO Forum's software activities, such as School WatSan Programme, Imam Orientation, Courtyard Meeting, Non-School Going Girls' Orientation, etc. PUP gave them targets to work on, and the VDC happily embraced them with a favour.

Md. Hanif has been a VDC member from its conception last year. He is very enthusiastic about the work they have been doing, their successes, and the issues they plan to tackle in the future. He is proud of the achievements they have made in the safe water and sanitation department, in the remarkably short time. The VDC threw itself wholeheartedly in the attempt to make the people realize the need for safe water, hygienic latrines and overall hygiene practices. They talked to the villagers, and visited all the houses. "Where men could not enter, the women did", says Md. Hanif. Their success, he says, is due to the fact that they "made people realize the need for development".

Md. Hanif believes, that village participation is also responsible, to a large extent, for the progress they have made in the village. The village people are their neighbours and relatives. Where everyone knows practically everyone else, it is easier to talk to the people, to get them to listen, and participate in the development programmes. The entire village will contribute to help with financial problems, to buy sanitation equipment, extend credit, etc. The VDC sits every month to decide on the state of their programmes, and what they will undertake next. Village opinion, Md. Hanif declares, play an important role in the work of the VDC. Since they are working for the people, the peoples' opinions are definitely of primary importance.

Md. Hanif is very optimistic about the projects the VDC will undertake in the future. Some of these are tree plantation, family planning, and a very important one, adult education. He believes that adult literacy is very important, "for a learned person will grasp development issues much more quickly, and will be more ready to accept what he reads and hears, and sees with his own eyes". The VDC plans to eradicate "tip shoi" by the end of 1998. "Tip shoi" is a form of fingerprint signature, in which illiterate people sign by placing their fingerprint on the

document. “We will teach the people to sign their own names”, he asserts. In this initiative to make the people more aware about development issues, the VDC plans to get newspapers, and make them available to all those who can read, as well as bring radio and television coverage into the village for greater awareness about country affairs. “One by one we will work towards other development programmes”.

Shahana Akhter is a female member of the Pahankucha VDC. She has been involved with a PUP family planning project for the past three years. With the establishment of the VDC, she was encouraged by the other members to join and share her views, opinions, and experience with the committee. She visits the villages to meet with the people, and tell them about development issues. She believes that the VDC does give her an equal opportunity to voice her opinion, and the baseline survey conducted in the village before the committee was formed, was done at her instigation. Sabina Akhter is a younger member of the village development committee. She is a change from the usual conservative female - more aware of her surroundings and the need for change. She joined the VDC to learn more about health, sanitation, and other issues, and to be better able to share this information with her contemporaries. She believes in the need for using safe water, and hygienic latrines, and learnt about the effects of unplanned unhygienic systems after joining the VDC. She wants to rally the villagers to be more conscious about such important health, family planning, and other such issues. “Women are still not very conscious about such matters. Family planning took forever to explain because of the preconceived notions families have about birth control, and the predilection poorer people have for having more children for more work hands. Literacy is an important tool for educating the people, and bringing development to the village”.



The chairman for the VDC in Pahankucha village commands great respect in the society. Abdul Sobhan is a liberation war fighter, and a staunch Awami League activist. Many of the other members in this VDC are also actively involved in the country's political scene and have different party affiliations. However, Mr. Sobhan believes that their political differences does not in any way encroach on, or influence the VDC's work. The VDC is politics-free, set up only for the betterment and development of the village. It is widely and warmly accepted by the village people. It is a tool to further their own goals for a developed and cleaner environment. The committee does have leadership qualities, and is able to bargain effectively with the local power structure. They even maintain relations with the government, although they have yet to provide assistance. Mr. Sobhan feels that the government has a duty and should help them out in some ways, such as providing equipment, space, etc. which would make their work easier.

The village development committee was a successful concept in reaching those who were previously missed because of the target group approach. The establishment of the VDCs to enhance the community management, ensure active participation of representatives from all levels of people, and even to mediate between the community people have been instrumental in attaining the response, and interest from the grassroots level. The VDC was established to work as the entry point to the overall development activities in the village. The village level participation of the community, through the village development committee has been tremendous in implementing NGO Forum's development programmes along with other development activities in the village.

## **PSF Makes Filthy Pond-Water 100% Safe**

“We were used to drinking pond-water. We felt a discomfort in the stomach. But there is no more the discomfort as we have started to drink the filtered water. For this reason I sent my wife or family members to carry water from one and a half mile distance”, says Nur Ali Gazi of Munshiganj of Satkhira district as he stands on the roadside. Nur Ali, who is now reaching sixty remembers the habit of drinking pond-water of his ancestors for three generations.

But he didn't hesitate to avail himself of the opportunity of the access to safe drinking water. When at first, initiatives had been taken to purify the polluted and muddy pond-water, people seemed to be doubtful about it. People doubted how it would be possible to purify water with mere brick-chips and sand. Abdul Majid of Munshiganj had the same doubts. He says, he, like many laughed at the NGOs efforts as they made the tanks and put brick-chips and sand in them. But as soon as the filter was started and supplied pure water, their disbeliefs turned into beliefs.

This filter is called Pond Sand Filter (PSF). It is a local technology sand filter for purification of pond-water. This technology has been introduced in Bangladesh in the sixties. But then it was only an experimental effort. Just after liberation a pond sand filter was set-up on the bank of a pond near a market at Patharghata in the coastal district Barguna. It became quite popular among the local people. But it was not possible to take widespread efforts to set-up more pond sand filters throughout the coastal belt. But it was not due to the unwillingness of the concerned persons. Actually, a reserved water reservoir is essential to set-up a PSF. This pond has to be

used exclusively for water supply purpose. Even if fishes are allowed in the pond, they will not be allowed any food. Moreover the construction cost of this filter is a bit high. The total cost to build a tank having three layers and to install a tubewell to raise water from the pond to the tank is about twenty five thousand Taka. On the other hand one such filter has the large capacity to supply water for at least one hundred families. But because of the cost involvement it is still not possible to reach this facility to the coastal people at a widespread level.

The technology of the filter is simple. The tank has three layers. Pond water should be raised to the tank with the help of a pump or tubewell. The uppermost layer contains large chips of brick or coir which will remove large particles of dirt from the water. Then the water will be accumulated in the mid-layer. Here small chips of brick and sand will finally purify the water and at the bottom layer pure water will be available for use through a tap. The cover of the tank is made of corrugated tin. In the mean time research has been carried out to examine the quality of the filtered water. Researchers have found it to be 100% safe for drinking. Considering the high cost, it has been decided to use this technology only in the coastal region. Because in many areas of the coastal belt it is not possible to pump water from underground through deep or shallow tubewells. Especially in these areas, pond sand filter has been used to purify pond-water. However the present arsenic crisis in tubewell water in many areas has led to the thought of using this technology countrywide. The limited number of PSFs of today are built with the financial support of the Department of Public Health Engineering of the Government of Bangladesh (DPHE) or NGO Forum.

There is a Pond Sand Filter in Jelikhali village of Munshiganj thana of Satkhira district. It has been implemented by the local



NGO “Shetu” under the financial support of NGO Forum. Another Pond Sand Filter has been installed on the main road of the thana. DPHE has sponsored for this PSF. Housewife Sujata Rani Karmaker, a teenaged girl named Aklima, day labourer Abdul Majid, housewife Binodi, villager Tapon Kumar Mondal and many more believe that Pond Sand Filter is a blessing for them. Because tubewell water is undrinkable for excessive salinity and iron. Moreover cooking rice was difficult with the tubewell water. Therefore the PSF technology has given them access to more safety and convenience.

The PSF spot has become a meeting place of people. It takes sometime to filter the water after it is pumped in the tank. The bottom chamber of the tank contains pure water always. But nobody takes water without pumping some more water for purification for another. The maintenance of the PSF is also very important. The brick-chips sand etc. need cleaning according to specific rules. Otherwise purification will stop. All the users take part in the cleaning activities. Each user contributes at least Tk. 1 or Tk. 2 for this purpose.

It is really a vital example of water management through community participation. If cost involvement can be reduced through research work, PSF technology can be used widely throughout Bangladesh. A concerted effort of the government and NGOs may create this option.

## What the People Say

In the Borochala village of Bhaluka, Mymensingh, the Human Development Programme or HDP, a partner organization of NGO Forum, plays the implementers role of ensuring that the various software activities on WatSan programme outlined by NGO Forum are properly conducted. These software activities are additional tools for the promotion and assurance of WatSan promotion throughout the nation. The activities focus on reaching the various cross-section of people, then through and with them, motivate and create an awareness among the people.

NGO Forum has identified and targeted the various indigenous groups in the village who need special attention when it comes to the work of sustaining and maintaining safe WatSan practices. These groups are opinion leaders or caretakers of households, or other people or groups who are better able to motivate the community people, than an outsider working in the region. With the help of the partner NGO working in the area, NGO Forum conducts its various software activities in an attempt to indoctrinate these people to safe water and sanitation habits, hoping that they in turn will motivate their village relatives, neighbours, and friends. In most regions the activities have been successful in gaining the acceptance of the people, and promoting WatSan habits quicker.

The Courtyard Meeting helped to reach women who are often reluctant to go far from the home to attend meetings, etc. The courtyard meeting is appropriate for its name in that women gather around a courtyard in an informal sitting and are taught WatSan practices. HDP in conjunction with the Komolaphuli Mahila Samity, conducts the courtyard meetings in Borochala village. The women are told about ways to prevent diseases and the spread of diseases through safe water and sanitation.



Asiya Begum who is the chairperson for the Komolaphuli Mahila Samity, agrees that attending these meetings have been beneficial as far as her family, and the locality is concerned. “Before the children used to defecate everywhere, and then poultry, flies, etc. would come into contact with these, and spread diseases. My family members would always be sick with diarrhoea or some other ailment”. With the information from the courtyard meeting, and a loan from the Samity, she bought and installed a latrine in her house. The frequency of sickness has considerably lessened, she admits.

Sufia Khatun says, “At first only women would attend and sit at the courtyard meetings. But after the men saw what we did, some of them started coming as well. Nowadays whenever we have meetings, some men will come and sit with us as well”. “HDP uses posters, charts, stickers, etc. to illustrate the WatSan ideals. Sometimes we are shown videos which demonstrate the hygienic WatSan habits.”, says Amena Begum.

“Nowadays, we don’t just sit at the courtyard meetings conducted by HDP. We go to other parts of the village and conduct our own courtyard meeting to help the women in those areas, and teach them about safe hygiene practices” Khodeja Khatun, another member of the Mahila Samity, further pronounces. “At first the men were reluctant to let their wives attend the meetings. They were conservative in this respect. Later on, after listening to what we talked about, they were convinced about the good of the meetings. The sanitation coverage in Borochala village is increasing day by day.”

Md. Mizanur Rahman is an Imam hailing from Hobir Bari, Borochala. He has been an Imam since 1985. In 1996, he received Imam training conducted by NGO Forum in collaboration with the Regional Training Centres of the Islamic



Foundation. The Forum conducts a day long session on WatSan during the Foundations regular ongoing training programmes. Mr. Rahman says, “They learn about hygiene practices from religious books. Cleanliness plays an important part in the Islamic religion, and all the books, the Quran, Hadith, etc. talk about the value of good health and hygiene”. Since the orientation he learnt about the work the NGOs are doing in the field with regards to health and hygiene. The Imam booklet published by NGO Forum was a big help because it had references to the Islamic religious books in mentioning the importance of personal hygiene practices, and sanitation, and the importance of hygiene in practising religion. The orientation further motivated Mr. Rahman to preach good hygiene practices. He would talk about these matters when he visited households in the villages, at religious sittings such as Waj Mahfils, during Friday prayers, and at the mosque.

In a predominantly Islamic country like Bangladesh, Imams are very respected members of society. People listen to them when they preach the word of God. The Imams command a greater respect because of their religious ties, and thus, the Imam Orientation, by NGO Forum through its partners, is geared towards motivating them to preach WatSan practices. Hobir Bari has 30-35 families, and Mr. Rahman has close ties with them all. He claims that all the families in this area are covered with safe water and hygienic latrines. “Such teachings should be repeated continuously. People forget the most important factor of life - Death. Why should they remember a comparatively trivial matter like safe WatSan? That is why they need to be reminded, so that they don’t forget, articulates the Imam very strongly”.

The WatSan fair is another of the Forum’s efforts to sensitize the rural folk to the WatSan programme. This was designed to simulate a typical festive fair, while at the same time familiarize

the attendants to the mechanisms of the WatSan programme. The WatSan fair is aided by visual material such as posters, leaflets, photography, books, and other WatSan materials, audio-visual shows, cultural programmes highlighting WatSan issues, demonstrations of hygienic latrines, and water technologies accompanied by basic information. The fair is attended by a large number of people, including community women, opinion leaders, students, teachers, and others. The fair, organized once a year at each regional demarcation of NGO Forum with the co-operation of the partner NGO, helps to spread awareness, and promote the WatSan ideal.

The traditional, conservative values of the village society had often frowned upon girls attending schools. These victims of circumstance were often left in the dark about important issues, health and hygiene among them. In an attempt to reach these young women who were not allowed, or could not attend schools, and are now too old to attend them, NGO Forum, in collaboration with its partner NGOs arranges for a Non-School Going Girls' Orientation programme. This orientation teaches young women the effects of open latrines, the diseases spread hence, the value of drinking safe water from tube-wells, using hygienic latrines, and basic health and hygiene information. Zohura Akhter of Pahankucha, Comilla, says that after attending the Non-School Going Girls' Orientation, she persuaded her family members to install a hygienic latrine in their house. Previously they had an open latrine, and until she attended the Orientation, she did not know that the abundance of sickness in the family was often the cause of using unhygienic latrines. Like Zohura, most of the other young attendees of the Orientation claim that they have installed hygienic latrines in their houses, and teach their children and family members good hygiene practices and to use safe water.



The Youth Orientation is another dynamic tool of reaching the people through the people themselves. The youth of the village are the future of the society. NGO Forum, with help from its partner NGO, and the assistance of the Youth Department of the Government of Bangladesh, organizes youth training to use this potential manpower to spread WatSan consciousness, not only among them, but also among the village community. To date, 1618 young men have received training in the youth programme. Raju Bhattacharjo, a member of a youth group in Dolpara, Sitakundu, Chittagong, says that whilst they knew about the importance of using safe water, and hygienic latrines, the Youth Orientation helped them to learn the reason behind its importance, and the correct ways to maintain hygiene and sanitation in the homes.

The means of reaching people through Rally, Miking, etc. have also proved successful in extending the WatSan idea to those who are unable to, or reluctant to attend meetings, orientation, etc. These are organized as campaign activities, and attract people through their festive atmosphere. Asiya Khatun of Borochala says, "Most of the villagers join and follow the procession as it passes by their houses. The rallies are festive and the people carry painted posters and banners which carry the WatSan slogans. The rally often ends at the Union Parishad where a video film is shown demonstrating safe hygiene habits".

The Forum has printed up and distributed various posters, leaflets, flip charts, etc. to assist in the implementation of their software activities. The walls of a primary informal school in Dolpara, Chittagong, are papered with posters depicting safe WatSan and hygiene practices. Along with regular studies, such safe water and sanitation ideals are also taught to the young children. Most of the offices of the partner NGOs working in the various regions also display WatSan posters. These posters



serve as a constant reminder to the people about safe hygiene practices.

A number of promotional video films have been created and used in various activities like training, orientations, Local Discussion Forums, Courtyard Meetings, and other promotional activities. NGO Forum also solicits radio spots on Bangladesh Betar, and television spots for advertisements on Bangladesh Television to extend the WatSan reach. The impact of these forms of media coverage has been favourable, and the community people are receptive to and are felt to retain the messages of the advertisements.

The use of software activities such as those mentioned have furthered the WatSan cause because of its very nature of total community mobilization. Where village meetings might have failed to reach the entire community, the individual emphasis on groups have been more fortunate. Such individual orientations and training programmes have also focused on the individual needs of the people, and helped to address them. The accompanying communication materials serve to further illustrate and demonstrate the teachings of WatSan.

## Iron Removal Plant Becoming Popular

*“Water, water, everywhere,  
Nor any drop to drink”*

This is almost the case with the people in the coastal belt. The struggle for safe drinking water is a grim fact for them. There was a time when people drank water from reserved ponds without knowing how harmful it was for their health. Pond water served for all the purposes like household uses or cooking or drinking. As a result diarrhoea and other water-borne diseases were their never-parting companions. But a new approach has been started in the drinking water supply sector since the sixties. Tubewell installation activities was started to supply water from underground. But this work becomes difficult and at some places impossible in the coastal areas because of the geophysical characteristics of the area. Not only that, the tubewells which have already been installed in these areas, create a new crisis – the presence of too much iron in the water makes it almost unusable. Different types of intestinal diseases are the results of drinking the iron contaminated water throughout the coastal areas.

Although deep tubewells have been installed at places to supply water with tolerable limit of iron and salinity, but it is not being possible throughout the entire coastal areas. This fact leads to new thoughts and research and development activities to make water iron-free. As a result a local technology has been invented to remove iron from water. This success has not been achieved since long. By now as many as twenty Iron Removal Plants have been installed in some villages of Satkhira and Bagerhat. Such a plant has been installed in the market-village Rahimpur. This plant is made of bricks and ferocement and has been





installed near a shallow tubewell. A pipe connects the tank with the tubewell. The tank has a CI sheet cover. It has three chambers. The water comes directly from the tubewell to be accumulated in the upper-chamber. The middle-chamber contains brick-chips to make the water iron-free. Water passes from the upper layer through the mid-layer and iron-free water is accumulated in the lower-chamber.

But it needs mentioning here that, it cannot be measured how much iron is removed from water through this plant. The NGO Forum representatives say that this technology has been introduced as an experiment. But soon research work would be started to measure the level of iron in water. The success of this experimental work will create the opportunity of extensive work throughout the coastal region. The construction cost of an Iron Removal Plant ranges from six thousand to seven thousand Taka. The beneficiary families share 25% of the cost whereas NGO Forum provides 75% cost through its partner NGOs.

Zahanara Khatun, an user of the Rahimpur IRP plant finds the water very good when she drinks it. But it takes 3/4 hours to bring 40/50 litres of water at the lower layer of the tank after purification. Moreover it needs to clean the brick chips every ten days. Otherwise the purification process becomes slower. According to Zahanara, although the iron-free water tastes good when drank, but it cannot be used for cooking rice, because it makes the rice too soft. But Sakhina Begum does not think that this is the case.

This Iron Removal Plant has been installed by ten families including Zahanara's family. But they opine that one plant can meet the whole demand of water of three families only.

The implementation of this plant has been carried out by the NGO "Shushilan" under Kaliganj thana of Satkhira district.

According to their survey and weekly review report, the rate of intestinal diseases and other water-borne diseases have decreased considerably among the members of the beneficiary families as a result of drinking iron-free water.

Under this project with the technical and financial support of NGO Forum, Shushilan, Shetu, Uddipan, Nabolok Parishad, Prodipan, and Reshilpi – these NGOs have installed 20 IRPs in Satkhira and Bagerhat districts. The concerned persons say that this technology has begun to gain popularity among the coastal community. The user Zahanara also echoes them.

## United We Stand...

With the dawn of a new day, and new hopes for the future, the people of Malipara did away with their old name, and became the new village of Dolpara, in Shitakundo, Chittagong. They were indeed once a pitiful story, eking out a miserable existence, living in a state of poverty and filth. The men and women worked as latrine cleaners, and this occupation, more than anything else, ensured that they were not confronted with a different, better, and cleaner way of life. The men drank in their free time, and their children roamed wild with no advantages of a school education. The community was far from health conscious, and no one even expected or hoped for a better life.

Young Power in Social Action or YPSA as it is more commonly known, is a partner NGO of NGO Forum, concerned with social development work. They are in group formation and savings, safe water supply, non-formal education, HIV and AIDS awareness and prevention, anti-drugs awareness, maternal and child health care and family planning, gardening and nutritional education, credit programme, social afforestation, and cultural development. YPSA is also responsible for spreading health and hygiene awareness in this poverty-stricken village of Dolpara. This organization also plays an active role in empowering the poor, especially women, through active participation of organized groups and committees at the grassroots level. YPSA is also attempting to transform the inactive young men and women of the society into skilled human resources and engage them in development activities.

It is astonishing to think that such awareness is responsible for the drastic way in which the lives of the people of Dolpara changed, but it is true. The teachings of YPSA brought about

health and hygiene consciousness among the people. They worked to bring safe water and hygienic latrines into the village, and impose personal hygiene standards. It helped those who were interested in such issues, to further spread awareness among the village people. In striving for a cleaner way of life, the community was also no longer satisfied with their prevailing circumstances. They rallied for a better life, respectable jobs, and an improved standard of living. They wanted to change - change to reflect their new-found awareness on how to live.

To reach all community groups, and work in unity for social mobilization, NGO Forum working methodology integrates the community into its development programme. No development programme of this sort is successful without the active participation of the people. More active than the NGOs are the village people in spreading information, and awareness. Human nature is such that one is more likely to listen to, and hear one's own. NGO Forum's community approach and management in WatSan promotion strives to involve the cross-section of the village. The partners have therefore, taken this initiative in their stride.

The various groups in the Dolpara play an important role in NGO Forum's and YPSA's work in the village. One such group is the Durjoy Singh, a youth group. They started a few years ago, and currently boast 15 members. Although they are primarily a recreation club, they also work towards spreading social consciousness, talk about health and sanitation issues, and are generally involved in social work. While previously aquatinted with such issues, they credit YPSA with their further awareness, which they learnt after a convention with YPSA. YPSA motivates the group in their work, often giving them recreational materials, such as bats, balls, clothes, etc.

Liton Kumar Das, a SSC student, is the current president of the Durjoy Singh. He says that in the beginning, the villagers would not listen to their teachings. But they persevered, and this constant repetition of the issues, combined with the impact of NGO Forum's software activities, such as school programme, imam training, etc., compelled the villagers to pay more attention. The group also tries to spread AIDS awareness among the villagers. They often hold discussions in the village, and invite the community to attend. "They might not listen to one person, but when everyone is saying the same thing, they have to listen. The people will spend money to buy latrines once they understand that they will not have to incur more expensive medical bills by using unhygienic sanitation systems". The youths also attempt to help villagers in need, especially single mothers who are often unable to fend themselves and their children.

Another such group in the village is the YPSA Malipara Mahila Samity. This is not one, but 12 women groups, each working towards the same social objectives. Champa Malakar is the chairperson for one of these women groups. The group is involved in income generating activities, geared towards women. In addition to their regular work, the group also spreads health and hygiene consciousness. They hold meetings every week, where among others, sanitation issues are also addressed. YPSA has also helped these women groups with the purchase of latrine sets. By addressing and motivating the indigenous groups in the village, an attempt is made for overall consciousness.

A number of the men and women from these groups, have attended the Local Discussion Forum or LDF, another initiative of NGO Forum to get the community working together for a safer environment. These discussions have a large attendance, counting YPSA officers, Imams, priests, local government

workers, community people, etc., in its numbers. Sanitation and health issues, disease awareness, and general village development are among the topics addressed at these meetings. LDFs are held 2-3 times a year depending on the need, and are jointly funded by NGO Forum and YPSA. These discussions have helped to a large extent in spreading health consciousness, and sanitary habits among the Dolpara villagers. A lot of people had open latrines before, but after attending the LDFs, they learned about the value of hygienic sanitary latrines, washing hands before eating, and after defecation, wearing sandals to the latrines, etc. It is also through the LDF that the village development committee is created.

“If you go under a banyan tree, you get shade. YPSA is like a banyan tree for us”. These are the words of Ranjit Das, a retired mechanical engineer of the Power Development Board. Mr. Das is also a priest and a respected member of society, and the current chairman of the Village Development Committee (VDC) in these parts. He got involved with YPSA because he approved of their work with education, health and hygiene, afforestation, recreation, etc. They have a recreation club in the village centre which houses all the recreation materials, and provides the space for a primary informal school. Their committee motivates the various groups in the village to work for the various development projects, such as tree plantation. Mr. Das has planted tree in his own yard, and encourages others to do the same. The VDC also motivates families to send their children to school. It is as a result of the committee’s work that most of the children in the village now attend school, and all the young men of the local youth group are educated, Mr. Das proudly claims. The VDC works for health and hygiene consciousness. In helping the people get covered by safe water and hygienic latrines, they have provided loans for the purchase of safe water technologies, and latrines. They have banished all



# ইপস্যা

## সমাজ উন্নয়ন সংগঠন

দেলি গাড়া

ইপস্যা মহিলা গ্রুপ (ক)

৩ নং ইউনিয়ন সীতা বুদ্ধ চৌধুরী

গ্রুপ নং- ইমক/সীতা/৫

traces of their earlier life, profession, and unhealthy drinking habits.

Although the word “Mali” is intended to mean a flower gardener, the people of Dolpara see it as a reflection of their earlier life as latrine cleaners. The word Mali, forming the name “Malipara” is crossed out on the sign on the tree advertising entrance to the village. In its place in the word Dol (referring to a Hindu festival) - it signifies more than a name change, it signifies a complete change in the way of life, attitudes, and definitely, the dreams for the future.

NGO Forum’s community approach and management programme was geared towards social mobilization. In this undertaking it embarked on a plan of implementation through its partner NGOs, involving a number of activities. The ongoing activities involved include National Workshops, Hygiene Education Programmes, Village Level Discussions, Meetings with Community People, Discussion Forums with Imams, School Based Discussion Forums, Rally, Miking, the formation of a Thana Advisory Committee, and many others. The project was implemented to ensure the participation of people from different walks of life, elicit their response, determine their role, and create a system of accountability through participation. The levels of system ranged from the highest planning and implementing institutions to the grassroots.

NGO Forum’s working tactics dictate that each partner NGO select 2 villages for 100% sanitation coverage. Previously, the village coverage was scattered as each NGO tried to work in too many villages. With this new system of 2-100%, the partners were able to focus on their respective selections, and there strive for 100% coverage. People were thus adequately addressed and provided with safe water, and sanitation systems. Palli Unnayan Parishad, or PUP, is another partner NGO of NGO Forum





working in two villages in Comilla. Pahankucha was the village they first targeted for 100% coverage. With the help of the local village development centre, this was achieved by the next four months. In future, they will select two more villages for 100% coverage.

Previously, when only private latrine producers were supplying the village, the coverage was far less than the 100%. NGO Forum's efforts of involving the private producers of sanitation equipment in helping to spread good hygiene practices and use of safe water, and offer the quality sanitary equipment at low prices, had not been worked upon in this area. As a result, the private producers showed no initiative in informing the people the benefits of using hygienic latrines, keeping them clean, etc. PUP set up a village sanitation centre (VSC) after receiving initial funding from NGO Forum in February 1998. The VSC was set up to produce and provide various types of latrine sets for the village community. It operates on a revolving fund, selling the sets, and using the money earned to buy the materials for the next production. The latrine produces about 50 sets on an average per month. The objective in establishing a VSC in the village was not only one of latrine set supply, but also to provide the buyers with information about the sets, how to keep them clean, etc. It also ensured that the villagers were getting quality equipment at low prices as set by the standards of NGO Forum.

Two mason took technical skills mason training from the Forum in Noahkhali, and started work here when they got back. Mozammel Hossain is the chief mason in this VSC. He used to work in latrine production before, but came to work for here in Pahankucha once the VSC was established. The training, he says furthered his knowledge about latrine production, and taught him newer, advanced, and more hygienic technologies in latrine production. He has also trained other latrine producers

on latrine technologies which are greatly demanded. As a result of the training, he also is more aware of the need for hygienic sanitation habits, such as washing hands, wearing sandals to the latrine, and makes it his duty to inform his customers. He believes that if the people are duly motivated, they will buy and install the latrines.

In addition to providing the villagers with easy access to hygienic latrines, NGO Forum also tries to provide safe water technologies to the villagers. It does so through its partner NGOs, which distribute tube-wells, pumps, etc. to their targeted groups in the villages. The tube-wells are then provided to the community, with the condition that the installation costs, i.e. digging, cementing, etc., are to be borne by the community. This cost sharing concept is to instill a sense of belonging among the village community - something they have spent hard-earned money on and are therefore, more motivated to use. Since it is not possible to cover all the areas, the Forum has targeted for coverage, with the present 475 VSCs, these are relocated. When 100% coverage in one village is achieved, the VSC is moved to a different village for coverage. This ensures the maximum number of communities are covered by the limited numbers of village sanitation centre.

At the same time as proving this sort of material help to the community, PUP also has integrated a community approach much like YPSA. Women play an important role in the family and community in WatSan management. It is they who bring in the water for daily use, for drinking and cooking, and take care of the family, and maintain the household. It is necessary to apprise them of safe water sources, the necessity of teaching their children sanitary latrine habits, keeping the latrine clean, etc. Women will also tell other women and mothers about such important issues, and thus spread safe water and sanitation habits. Women are yet not conscious about their role in such



matters. It is crucial that these women are aware of the role they play in WatSan management, and are thus, targeted to promote safe water and sanitation habits among the members of their own families.

The Non-School Going Girls' Orientation is a step in the right direction in apprising women of their important role in WatSan management. Zohura Akhter is one young attendee in the Orientation programme in Pahankucha, Comilla, under PUP's advisory. She says that 4 months ago after attending the Orientation, she learned about the ill-effects of unhygienic open latrines, and installed a water-seal latrine. The orientation is geared toward teaching young women the effects of open latrines, the diseases spread hence, the value of drinking safe water from tube-wells, etc. The orientation reaches young women who do not have the benefit of school education and are now too old to attend school. It is important that these women who are involved in daily household chores, are taught safe water and hygienic sanitation habits. Zohura Akhter says she installed a hygienic latrine because "even if she might not consider it necessary, she has no right to expose the people around her to unsafe, polluted environment caused by an open latrine".

The impact of the community approach in both the areas surveyed have shown a favourable upward progress towards total safe water and hygienic sanitation. There has been a marked increased demand for hygienic latrines, as well as for tube-wells, and other safe water technologies in the intervention areas. The use of tube-wells for safe water, and latrines for hygienic sanitation use have lessened the previously widespread diarrhoea, and other diseases. Moreover, the people are definitely more health conscious, and it is easier for the more knowledgeable people to spread health awareness among the villagers. It is not only NGO Forum and its partners which

consider themselves successful. The community people working for a better, cleaner tomorrow, are also proud to acknowledge the success of their work and the response they have received from the villagers working with them, despite their previous beliefs.



## **Arsenic Turns Pump-Water into Villain or Victim?**

**T**he tube-wells stood but a bare 20 feet apart. Yet, one dispensed safe, unadulterated drinking water, while the other was deadly in the extreme, containing arsenic well over the accepted safe levels. These tube-wells were located within the office perimeter of Gono Kallyan Trust (GKT) a partner NGO of NGO Forum, also dealing in safe water and sanitation, located in the Saturaia village in Manikganj district.

More than 90% of the people of Bangladesh get their drinking water from the million plus tube-wells that have been installed for the anti-diarrhoea campaign to reduce water borne diseases. Now several are dispensing arsenic laced water with the result that many people are now showing signs of arsenic related diseases. This situation has accelerated in the past two years to a degree such that currently more than 40 districts of the 64 in Bangladesh are affected by arsenic, and 220,000 people, as of June 1998 are supposedly at risk. Arsenic is a metalloid substance that is commonly found in ground water, and is being spread through the use of deep tube-wells, which have been targeted as the origin of chronic arseniasis. The shallow tube-well waters in some areas of Chandpur, Barisal, Jessore, and Kushtia are heavily contaminated with arsenic ranging from 0.01mg to 3.0mg per litre. The waters of 56% of tube-wells are above the World Health Organization maximum tolerable limit of 0.05mg/l. In these areas, the intensely contaminated tube-wells have been sealed by the Department of Public Health Engineering (DPHE) without funding out any alternate safe drinking water facility.

Concerned organizations have, over the decades, encouraged the use of pump technologies for safe groundwater access. The

rationale being this emphasis was that groundwater was affordable, and close to the community. Groundwater was also safe from pollutants and biological contamination. However, the start of the Green Revolution in the 1970s, saw the demand for excessive amounts of water for agricultural use to feed the growing population. This, in turn, meant an increase in the installation of tube-wells, both power and hand driven, and enormous quantities of water were being drawn out from various underground sources. While the amount of water being lifted for drinking purpose is recharged naturally, the recent intensive pumping out of water for other uses has brought the underground arsenic into the tube-wells and pumps. Noted specialists have expressed their opinion regarding the cause and effect of the arsenic laced water being spread through the groundwater, via tube-wells and pumps, emphasizing the severity of the contamination.

According to Momtaz Begum, the Training Officer of Gono Kallyan Trust (GKT), an initiative was taken last year by GKT, to test some of the tube-wells in the village around the office. She herself tested 22 of these tube-wells, and 20 of these 22 contained quantities of arsenic, although only 2 were over the 0.05mg/l. Steps have yet to be taken regarding this issue, and since 1997, no other tube-well has been tested. Since the threat of arsenic is still relatively new, the community is unaware of the arsenic situation and the threat it poses. They refuse to believe in the presence of arsenic, because none yet have been afflicted with the symptoms of arseniasis. The only people cognizant of this vital information are at a loss what to do. A programme of information dissemination has been undertaken, and steps to inform the villagers, and take measures to combat the situation are also in the beginning stages.

Those whose drinking supply have been tested and know of the arsenic contents turn a blind eye to it. While there is no



substitute remedy available, the people have no choice but to drink the contaminated water. In most cases, there is no availability of safe water. Rokeya Akhter faces this grim situation, being one of the owners of a contaminated tube-well. Although she is an officer in GKT, and well aware of the hazards of drinking arsenic laced water, she is left with no choice but to drink from it. She has no nearby source of safe water, not even a pond where she could go to obtain and boil the water. Her only attempt at caution is to filter the water, which may lessen the iron content, but is far from removing the arsenic. She also eats plenty of fresh fruits and vegetables in the hope that the nutrition will lessen her and her family's susceptibility to arsenic diseases. Most of the poor folk in the villages cannot even utilize this measure. Until an alternative is suggested to her, she like the people around here, will continue to drink arsenic laced water.

NGO Forum, in its principal role of advocating for safe water, is embroiled in the middle of this dynamic issue. It has been targeted as the country's chief patron of the NGOs dealing in water supply and sanitation. Its programme of encouraging the installation and use of tube-wells, and pumps for safe water which are dispensing the contaminated water, has come under public scrutiny. The Forum faces the dilemma of whether to seal off the tube-wells, thus exposing millions of people to the risks and hazards of diarrhoea from unsafe water, or to implement a system of purification, yet unknown, the technology for which may both be impractical and expensive for the rural masses. Momtaz Begum says it well when she remarks, "Over the past decade we taught the people not to drink pond water, which was very harmful and unsanitary. We enforced the installation and use of tube-wells saying that, only these should be used for drinking and cooking. Now if we turn around and tell them not to use water from the tube-wells and instead use pond water, they are going to come after us with

sticks”. Habituating the people to drink tube-well water was the result of a long and arduous process, getting them to change once again may take another decade which would prove to be too long.

Both Rokeya Akhter and Momtaz Begum agree that it is, at present, useless to inform the people about the severity and effects of drinking and cooking with arsenic contaminated water. Until a substitute is suggested, and made available to the people they will continue to drink the water. Although rumours of arsenic were initially scary, situations have compelled the people to continue using the water, falsely believing that nutritious foods will entirely counter the effects of the arsenic.

NGO Forum is attempting to deal with the situation, the best it can. It is supporting its partner NGOs in undertaking the biennial testing and inspection of its tube-wells, and where arsenic levels exceed the WHO safety levels of 0.05mg/l, the targeted tube-wells are marked. In addition, testing is also undertaken during the installation of new tube-wells, and where there is a probable risk of arsenic contamination, plans for installation are abandoned. Marking the tube-wells was a more viable alternative than a complete seal-off, for, while these wells cannot be used for drinking or cooking, they can be used for other purposes. However, this also poses a problem. Almost 100% use of tube-well water is for drinking and cooking purposes. There is little effect of telling the people not to use their chief source of water for internal use, while at the same time not being able to suggest the substitute. At present there is not even a marking system implemented in the Sauria village of Manikganj district. “What is the use of marking when the village people will continue to drink the water regardless?” says Momtaz Begum. “Find us an alternative, and we will ensure that the villagers are suitably informed and motivated to use the substitute safe water”. It is this search for substitute methods of



obtaining water which is hindering the Forum and its partners' work.

In its role of familiarizing the rural folk with the arsenic situation, NGO Forum has incorporated arsenic issues in its regularly conducted training courses' agenda. These courses benefit not only the partner NGOs, but also the community people, and it is encouraged that these people will further disseminate the information among the relevant persons. Mosharaf Hossain Pannu, the person in charge of the Sanitary Programme of Gono Kallyan Trust (GKT), was one of the two people, who had completed a 3-day NGO Forum conducted training course on arsenic. The training course, he said had provided valuable information about the arsenic compound. The issues covered included the sources of safe water, the nature of the arsenic compound, how it is spread, and how it attacks, the steps by which arsenic is spread in underground water, the arsenic safety levels, the use of arsenic in day to day use, the arsenic situation in Bangladesh, the victims, symptoms, and cure of arsenic, and other related issues. According to the training course, 2300 people have acute arseniasis, although the unofficial numbers are supposed to be much greater. Problems arise because most arsenic symptoms are confused with malnutrition, and it is further true that most older people, 40 years and above, deficient in Vitamins A, C, and E are most susceptible to arsenic related diseases.

Participation in the training workshop is one of the first steps GKT is taking to combat with arsenic situation in the village. Now will ensue the laborious task of telling the people about the situation, making them aware of cause and effects, and persuading them to take combatant measures. By the NGO Forum guidelines, GKT must now undertake the testing of all the tube-wells in the area, reporting on the state of affairs, and mark the affected tube-wells. In addition, a programme of

disseminating the information to the public must be undertaken immediately, and the community must be mobilized to assist with this. Mr. Hossain staunchly believes that they will be successful in this initiative, and does not share his colleagues' dismal view of the situation. He is ready to start with a program of indoctrination, and training of the village folk.

In most regions of the country, an effective combative programme has still to be undertaken. The people of Sitakundu in Chittagong are still unaware of a substance such as arsenic. Yet, arsenic has been found in their tube-well waters, and is in many cases over the accepted 0.05mg/l safety level. The officers of Young Power in Social Action or YPSA is the partner NGO of NGO Forum working in this region. They are reluctant to inform the people about the arsenic content in their waters, until have a plan of action to deal with the situation. According to the director of YPSA, Arifur Rahman, they do not want to alarm the people with the arsenic situation. That will only create panic among the village folk, and they will demand a substitute solution which is not available to YPSA. YPSA has yet to undertake any measures, such as testing, participating in arsenic training courses, etc., to deal with the predicament. Mr. Rahman feels that they belatedly received word of the arsenic situation, and that the relevant authorities should have been more expeditious with the release of such information.

NGO Forum declares that “the strategy of telling all the NGOs to seal off their tube-wells is too drastic a measure. All the tubewells are not supplying arsenic, and until an alternative is found, sealing off all the tube-wells is too extreme a step. There is still no widely accepted belief as to the root cause of arsenic pollution. There is even much doubt as to the currently publicized information about the arsenic situation. Hence, so far, NGO Forum will abide by its stand of merely testing and marking the affected tube-wells, and at the same time, continue

its research into the cause and solution of this situation”. NGO Forum organized a National Seminar to mark the World Water Day on 22<sup>nd</sup> March 1998. The primary objective of the Seminar, titled “Groundwater Resource: Bangladesh Perspective”, was to critically analyze the groundwater as a resource, its declining trend and pollution, and the adverse effect on domestic water supply, social implication of the phenomena, and its effect on gender and development. The Seminar, which was attended by representatives from various organizations, donor agencies, UN-bodies, World Bank, NGO community, and the mass media, addressed the threat of arsenic from groundwater.

NGO Forum’s present initiatives in tackling the arsenic situation are immediate and temporary measures. It is also working with different, more permanent, surface water treatment methods, such as pond sand filtration system, rain-water harvesting, and others, which are safe from arsenic. These treatment methods are currently being undertaken in the coastal areas, and the areas heavily affected by arsenic.

The Pond Sand Filter (PSF) is a very simple and low-cost technology, which is appropriate for purifying pond water in the coastal belt. Filtration is a process of water purification in which water from a sedimentation tank is allowed to pass through a bed of filtering media, usually sand and khoa, and the filtrate is collected in a storage tank through an under-drain system. The filter media is very efficient in removing colour, odour, turbidity, Iron, and manganese. The PSF system ensures, that a) the filtered water will be safe to drink, b) the water will be clear and clean, c) the iron content will be at a minimum, d) the salinity will be minimal, e) the water will be palatable, and f) the water will be suitable for domestic use.

The Rain-Water Harvesting System is also another viable alternative to the arsenic situation. Such rain water collection

systems have been used since ancient times and evidence of roof catchment systems date back to early Roman times. The technology also has a long history in Asia, where rainwater collection practices can be traced back almost 2000 years in Thailand. In Bangladesh, traditional rain water collection have been used in the coastal regions and Hill Tract areas from many years. People used large earthen pots to store rain water and use in the dry spells. The problems with ground and surface water supplies such as salinity, contamination, etc. have lead to the development of the rain water harvesting system. Roof tops are most commonly used as the catchment. The rain is collected into a suitable storage or tank by means of an inlet structure, which collects the water running off the sloped or horizontal roof surface. The rain water harvesting system is affordable, reliable and easily constructed. It provides water which is clean and of good quality.

Although NGO Forum plays an apex role in spreading the use of safe drinking water, and water supply, it should not be left alone in this field of maintaining the existing safe water coverage. All the sectoral organizations working in this capacity should contribute in ensuring safe water. NGO Forum along with its partners is also endeavouring to communicate to the rural people the importance of being familiar with the arsenic situation. As it is not possible for the Forum to test all its tube-wells, the community people are also being urged to take water samples from the wells for testing, including those which are not NGO Forum installed. They recommend that the affected wells be marked, and not used for drinking and cooking purposes, although it is safe for external use. Community mobilization is a necessary effort to combat the arsenic situation, and although alternative methods of obtaining safe drinking water are being suggested and in a lot of instances, utilized effectively, the gravity of the situation is still severe.

## Abbreviations

ADAB	:	Association of Development Agencies in Bangladesh
AIDS	:	Acquired Immune Deficiency Syndrome
APHD	:	Asian Partnership for Human Development
CBO	:	Community Based Organization
CDD	:	Centre for Disability Development
DPHE	:	Department of Public Health Engineering
GKT	:	Gono Kallyan Trust
HDP	:	Human Development Programme
IRP	:	Iron Removal Plant
LDF	:	Local Discussion Forum
NAF	:	Nayan Action Foundation
NGO	:	Non-Government Organization
PKSF	:	Palli Karma Sahayak Foundation
PSF	:	Pond Sand Filter
PUP	:	Palli Unnayan Parishad
RWHS	:	Rain-Water Harvesting System
SPUS	:	Samajkallyan-O-Palli Unnayan Sangstha
SSC	:	Secondary School Certificate
TOT	:	Training of Trainers
VDC	:	Village Development Committee
VSC	:	Village Sanitation Centre
WatSan	:	Water and Sanitation
WHO	:	World Health Organization
YPSA	:	Young Power in Social Action











A single vertical line of text, possibly a page number or a section marker, running down the left side of the page.

