THE PHAST INITIATIVE

Participatory Hygiene and Sanitation Transformation

A new approach to working with communities

World Health Organization
Geneva

UNDP-World Bank Water and Sanitation Program
Prepared by Mayling Simpson-Hebert, Ron Sawyer and Lucy Clarke as an information document to the water supply and sanitation sector.

Front cover illustration by Victoria Francis
Photography by Mayling Simpson-Hebert

The PHAST initiative is a joint project of WHO and the UNDP/World Bank Water and Sanitation Program.

Collaborating institutions

Botswana: Ministry of Health, Ministry of Local Government, Lands and Housing

Kenya: Ministry of Health, CARE-Kenya, Kenya Water and Health Organization (KWAHO)

Uganda: Ministry of Health, Ministry of Natural Resources, Energy and Minerals, Rural Water and Sanitation Programme (RUWASA), Katwe Urban Pilot Project (KUPP), WaterAid

Zimbabwe: Ministry of Health, Department of Environmental Health, Rural District Council (RDC), Agricultural Technical and Extension Services (Agritex), Ministry of National Affairs, Employment Creation and Cooperatives (MNAEC), Africare, PLAN International, Mvuramanzi Trust Zimbabwe, Lutheran World Federation

UNICEF country offices in Botswana, Kenya, Uganda and Zimbabwe

Network for Water and Sanitation (NETWAS)
Institute of Water and Sanitation Development (IWSD)
Swedish International Development Agency (Sida)
Danish International Development Agency (DANIDA)

Reprinted 2000

© World Health Organization, 1997

All rights reserved. This document may be freely used, copied and translated, in whole or in part, for educational and other non-commercial purposes, but any use for commercial or promotional purposes (including distribution for a fee to third parties) is strictly prohibited. Any other use of the document, including adaptation into electronic form, requires permission from WHO, and requests should be directed to Rural Environmental Health, World Health Organization, 20 avenue Appia, CH-1211 Geneva 27, Switzerland.

Designed by WHO Graphics
Contents

List of acronyms iv
Introduction v
Acknowledgements vi

1. What is PHAST?
   Health awareness and understanding – a basic premise 1
   Health-related community development principles of PHAST 2
   New principles on hygiene and sanitation promotion 3
   SARAR – the underlying methodology 4
   Key factors needed for effective participation 5

2. How PHAST began
   Working principles of the partnership 7
   The selection of countries 7
   Two creative workshops 8
   Field testing 9
   Monitoring and evaluation 12

3. The impact on communities 15
   Examples of impact 15
   Common achievements of the pilot phase 16
   The impact on extension workers 17

4. The lessons learned 18
   On behaviour change 18
   On the requirements for success 18
   On how to start 19
   On how to sustain 19
   On how to expand 20

5. The future and the potential of PHAST 21

Annexes
   A. Synopses of experiences in pilot countries 23
   B. List of collaborating institutions 30
   C. List of persons involved in PHAST 31
   D. Participatory approaches to water and sanitation change:
      the roles of PROWWESS and SARAR. 36
### List of acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agritex</td>
<td>Agricultural Technical and Extension Services</td>
</tr>
<tr>
<td>CARE</td>
<td>Cooperative for Assistance and Relief Everywhere, Inc.</td>
</tr>
<tr>
<td>DANIDA</td>
<td>Danish International Development Agency</td>
</tr>
<tr>
<td>ITN</td>
<td>International Training Network for Water and Waste Management (Zimbabwe)</td>
</tr>
<tr>
<td>IWSD</td>
<td>Institute of Water and Sanitation Development (Zimbabwe)</td>
</tr>
<tr>
<td>KUPP</td>
<td>Katwe Urban Pilot Project (Uganda)</td>
</tr>
<tr>
<td>KWAHO</td>
<td>Kenya Water and Health Organization</td>
</tr>
<tr>
<td>MNAECC</td>
<td>Ministry of National Affairs, Employment Creation and Cooperatives (Zimbabwe)</td>
</tr>
<tr>
<td>NETWAS</td>
<td>Network for Water and Sanitation (Kenya)</td>
</tr>
<tr>
<td>NGO</td>
<td>Nongovernmental Organization</td>
</tr>
<tr>
<td>PALNET</td>
<td>Participatory Learning Network (Africa)</td>
</tr>
<tr>
<td>PHAST</td>
<td>Participatory Hygiene and Sanitation Transformation</td>
</tr>
<tr>
<td>PROWWESS</td>
<td>Promotion of the Role of Women in Water and Environmental Sanitation Services</td>
</tr>
<tr>
<td>RDC</td>
<td>Rural District Council</td>
</tr>
<tr>
<td>REH</td>
<td>Rural Environmental Health Unit/WHO</td>
</tr>
<tr>
<td>RWSG-EA</td>
<td>United Nations Development Programme/World Bank Regional Water and Sanitation Group – East Africa</td>
</tr>
<tr>
<td>RUWASA</td>
<td>Rural Water and Sanitation Project of the Government of Uganda</td>
</tr>
<tr>
<td>SARAR</td>
<td>Self-esteem, Associative strengths, Resourcefulness, Action-planning and Responsibility</td>
</tr>
<tr>
<td>Sida</td>
<td>Swedish International Development Cooperation Agency</td>
</tr>
<tr>
<td>UNDP/DGIP</td>
<td>United Nations Development Programme/Division for Global and Interregional Programmes</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
Introduction

PHAST stands for Participatory Hygiene and Sanitation Transformation. It is an innovative approach designed to promote hygiene behaviours, sanitation improvements and community management of water and sanitation facilities using specifically developed participatory techniques.

This document describes the underlying principles of the approach, the development of the specific participatory tools, and the results of the field tests done in four African countries.

PHAST is unique because the underlying basis for the approach is that no lasting change in people’s behaviour will occur without understanding and believing. To summarize the approach, specific participatory activities were developed for community groups to discover for themselves the faecal-oral contamination routes of disease. They then analyze their own hygiene behaviours in the light of this information and plan how to block the contamination routes.

The approach was field tested in four African countries: Botswana, Kenya, Uganda and Zimbabwe in both rural and urban areas. The results were very encouraging. The approach involved community groups in a way never before possible. Groups planned ways to improve hygiene behaviours in the community, to build or improve facilities and they made plans for operation and maintenance of facilities. The PHAST initiative laid the ground work for communities to take their own development forward. Even though the approach was tried in different countries and different types of communities, the results were equally inspiring. The approach can be replicated successfully provided a number of supporting conditions exist.

This report documents:

- the principles which underlie the approach;
- how the methodology was developed at workshops in the African region;
- the impact that PHAST made on communities and extension workers that were part of the field test;
- the lessons learned during the field test;
- how the approach can be adopted more widely and what the enabling factors for this are.

PHAST generated a ground swell of motivation and enthusiasm which we would like to share with others. This document is a start in that direction. It will be followed by a guide for extension workers on how to implement the approach at community level, a sample tool kit of graphic materials which accompany the approach and a manager’s guide.
Acknowledgements

The PHAST initiative owes its success to all the people who have faith in the capacity of all human beings to be creative and to be leaders of change, if approached in the correct manner. This includes not only the master trainers and extension staff who promoted the methodology, but also the institutions that supported the effort without necessarily knowing very precisely the methodology.

Thus, thanks go to the UNDP/World Bank Water and Sanitation Program who was a joint partner with WHO in this initiative.

The initiative, however, would not have been possible without the support and participation of the Ministries of Health in the four pilot countries: Botswana, Kenya, Uganda and Zimbabwe, to whom we are most grateful. In order not to overlook another important contribution, mention needs to be made of the Environmental Health Department of the Ministry of Health in Ethiopia which was represented in all the regional workshops.

Particular thanks also go to the Regional Water and Sanitation Group – East Africa (RWSG-EA) part of the UNDP/World Bank Water and Sanitation Program for facilitating the adaptation of the PROWESS/SARAR methodology for pilot testing PHAST.

Special acknowledgement for their contribution goes to all those involved in the training workshops and in field testing of the PHAST approach including; Uganda’s Rural Water and Sanitation (RUWASA) project, UNICEF in Kenya, Botswana and Zimbabwe, the Regional and Water Sanitation Group-East Africa, the Institute of Water and Sanitation Development (IWSD) in Zimbabwe, the Network for Water and Sanitation (NETWAS) in Kenya, CARE International in Kenya, the Kenya Water and Health Organization (KWAHO), the Katwe Urban Pilot Project (KUPP) and WaterAid/Uganda.

Special thanks to Gunnar Schultzberg who provided encouragement towards the collaboration between the World Health Organization/Rural Environmental Health and the UNDP/World Bank Water and Sanitation Program Group in Nairobi (Regional Water and Sanitation Group-East Africa). Thanks also go to Rose Lidonde, Noma Musabanye, T. Motsemme, and Therese Dooley for gathering specific, sometimes obscure information for the country synopses; to Eric Dudley, José Martinès and Heather MacDonald for commenting on an early draft. We are also very grateful to Anna Girling for copy editing this document.

There were many donors to the PHAST initiative, including the Swedish International Development Cooperation Agency (Sida), the Danish International Development Agency [DANIDA], UNICEF, CARE International in Kenya and the government of Norway. Their generosity and faith in the project were crucial to its success.

Mayling Simpson-Hebert,
WHO, Geneva
1. What is PHAST?

P articipatory
H ygiene
A nd
S anitation
T ransformation

... is an innovative approach to promoting hygiene, sanitation and community management of water and sanitation facilities. It is an adaptation of the SARAR methodology of participatory learning, which builds on people’s innate ability to address and resolve their own problems. It aims to empower communities to manage their water and to control sanitation-related diseases, and it does so by promoting health awareness and understanding which, in turn, lead to environmental and behavioural improvements.

PHAST uses methods and materials that stimulate the participation of women, men and children in the development process. It relies heavily both on the training of extension workers and on the development of graphic materials (sets of which are called ‘tool kits’) that are modified and adapted to reflect the actual cultural and physical characteristics of communities in a particular area. The production of PHAST materials therefore requires trained artists as well as trained extension workers.

---

1 SARAR stands for Self-esteem, Associative strengths, Resourcefulness, Action-planning, and Responsibility. It was developed during the 1970s and 1980s by Dr. Lyra Srinivasan and colleagues for a variety of development purposes (see Annex E). The major work describing the methodology for the water and sanitation sector is entitled Tools for Community Participation: A Manual for Training Trainers in Participatory Techniques. PROWESS/UNDP Technical Series Involving Women in Water and Sanitation, New York, 1990.
Health awareness and understanding — a basic premise

An underlying principle of the PHAST initiative is that no lasting change in people’s behaviour will occur without health awareness and understanding. People must believe that better hygiene and sanitation will lead to better health and better living.

It is often argued that people will not change their water, sanitation and hygiene behaviour as a result of health awareness. Some argue that people who have never heard that germs cause disease cannot understand the connection between their behaviour and subsequent illness. Even if they are taught, the argument goes, they will not care. It is said that such people have traditional beliefs about the causes of disease and that these will prevail no matter what is taught. Others argue that people may understand health messages but they will change only through a desire to acquire status, prestige, convenience or privacy, and that hygiene and sanitation should be promoted only on these bases.

The PHAST initiative challenges this view. Firstly, it does not deny that people have traditional beliefs about the causes of disease. Some of these may be consistent with modern scientific theory, some not. Others may be found to be valid if scientifically tested. People everywhere do rely on traditional beliefs to explain the causes of and cures for diseases, but are not incapable of also understanding other explanations. Secondly, people may be persuaded to change a habit or build a facility for reasons other than health (such as status or privacy), but the idea of improved health may also be a motivation. The PHAST initiative recognizes that much of the great shift in health-related behaviour in the last century has been due to education and a recognition of the relationship between public and private sanitation facilities, behaviour and disease transmission routes. There is no reason to believe that people everywhere cannot acquire the same knowledge and act upon it. Thus PHAST has proceeded on the premise that people can understand and that behaviour will only meaningfully change and be sustained when people understand and believe in health concepts. Belief underlies all enduring behaviour change and, without it, changes soon fall back into old behaviour patterns. If this is the case, then why have health education messages largely failed to result in behaviour change? The practitioners of PHAST have observed that conventional health education messages are widely known and largely understood, but that these messages do not enable people to implement change. In fact, there are few messages on how to create a credit scheme, how to convince your husband that he must help carry more water to the home, or how to persuade your mother-in-law that you need to attend a planning meeting. The objective of PHAST is not only to teach hygiene and sanitation concepts (where needed) but, more importantly, to enable people to overcome constraints to change. It aims to do this by involving all members of society — young and old, female and male, higher and lower status — in a participatory process involving: assessing their own knowledge base; investigating their own environmental situation; visualizing a future scenario; analysing constraints to change; planning for change; and finally implementing change.
Health-related community development principles of PHAST

The main underlying health-related community development principles of PHAST are as follows:

- Communities can and should determine their own priorities for disease prevention.
- People within a community collectively possess an enormous depth and breadth of health-related experience and knowledge. Within most African (and developing world) communities there already exists a rich knowledge base that includes both traditional and modern wisdom.
- Communities are capable of arriving at a consensus regarding the hygiene behaviours and sanitation systems most appropriate to their specific ecological and cultural environment.
- When people understand why improved sanitation is to their advantage, they will act.
- All people, regardless of their educational backgrounds, are capable of understanding that faeces carry disease and can be harmful, and can learn to trace and describe the faecal–oral route of this disease transmission within their own environment.
- There is a manageable set of barriers that can help to block this transmission. Communities can identify appropriate barriers, based on their own perception of effectiveness and according to local resources (cost).

These principles are derived from the collective experience of the authors and close colleagues who have worked with communities around the world, some using participatory methods for development and others carrying out anthropological studies.
New principles on hygiene and sanitation promotion

The PHAST initiative has also built on some of the more recently developed principles on how to promote sanitation more effectively. Some of these were expressed in WHO Informal Consultations held in 1992 and 1993, and have since been expressed and affirmed elsewhere. The promotional principles built into the PHAST methodology are as follows:

- Any sustainable improvement in hygiene and sanitation must be based on a new awareness of the complex interaction between behavioural and technological elements.
- The best way to achieve sustainable improvement is to take an incremental approach, starting with the existing situation in a community and building up a series of changes.
- Improvement in hygiene behaviour alone has been shown to have a positive health impact whereas improvement in sanitation facilities alone may not bring health benefits. Therefore, greater emphasis needs to be put on improving hygiene behaviour, but the ideal situation would be one where improvement in both behaviour and facilities can take place simultaneously.

SARAR — the underlying methodology

The PHAST initiative uses SARAR as its underlying participatory methodology. A basic principle of SARAR is the recognition and affirmation of people’s innate abilities. The system aims to help people recognize these talents within themselves and to use them. Two main principles are:

- People will solve their own problems best in a participatory group process.
- The group collectively will have enough information and experience to begin to address its own problems.

Other important principles of SARAR include:

Principles on learning

- Sustainable learning best takes place in a group context, which helps to produce a normative shift and, eventually, a change in behaviour that is sustainable because it is socially accepted or endorsed.
- An appropriate learning environment can provide an opportunity for a group to make a collective review of existing information and experience, thereby arriving at a deeper level of understanding and a clear course of action.
- Concept-based learning is more effective in bringing about sustainable change than message-based teaching.

---


Compared to the message-based approach, new concepts allow more new information to be assimilated and processed.

- The clustering of concepts provides the basis for a normative shift, which becomes a model for future behaviour.
- Literacy, formal schooling and hygiene and sanitation messages are not prerequisites to making effective decisions.

**Principles on decision-making**

- The people closest to a problem are those best able to find the solution (this applies equally in programme and community contexts).
- Those who create decisions will be committed to following them through — hence sustainability.
- The community understands its own situation best. Their involvement will result in a higher level of effectiveness and sustainability than could be expected from externally imposed solutions.
- Communities are capable of accurately describing their present situation and problems and of visualizing possible future improvements.
- The more of their own material and financial resources people invest in change, the greater will be their commitment to following it through.
- Self-esteem is a prerequisite to decision-making and follow-through.

**Principles on mechanisms for information exchange and discovery**

- Information exchange and discovery raises individual and group self-confidence.
- When people know that they are responsible for finding a solution they start to demand information. Such demand opens the way for information exchange and dialogue.
- By helping people to learn from each other, communities come to recognize their own knowledge base.
- Through a creative learning approach based on active discovery, individuals can evaluate and change their own behaviour, and communities can choose and initiate their own development.
- Technical information is best provided in response to needs identified by the community, following its own process of problem identification and analysis. External intervention with technical information and support too early interrupts the process and has a negative effect.
- Applying SARAR at both community and institutional levels releases creative energy which will help sustain programme momentum and stimulate thinking about new goals and aspirations.

**Key factors needed for effective participation**

The participatory process will work only if there exists: respect for people’s knowledge and ideas, with clear recognition of their individual and
collective inputs; faith in the creative potential of people and in the synergy of the participatory process; a minimum of structure, a maximum of participation; loyalty to the group; and a commitment to creating opportunities for people to express themselves.

To sum up, SARAR is a growth-orientated (rather than a top-down, message-focused) approach. It is an individual-centred learning approach which systematically seeks to draw on deep-seated human capacities for self-motivated creative change and to channel these transformational forces through group processes.

In order to assure maximum success, these basic principles of empowerment should be applied consistently, fairly and at all levels. Where this does not happen there is a significant chance of not achieving the original objectives or a danger of having the process degenerate along the way. Thus, it is important to identify the factors that enhance effective participation, as well as to recognize and avoid those factors that inhibit it.

The PHAST initiative has been able to put these principles into operation at international, inter-country, national and community levels.
2. How PHAST began

Building on a shared belief in the principles outlined in the previous section, the United Nations Development Programme/World Bank Regional Water and Sanitation Group — East Africa (RWG-EA), under the PROWWESS Project⁴, and the Rural Environmental Health Unit (REH) of WHO in Geneva joined together to develop and test a new approach.

**Working principles of the partnership**

From the outset, it was decided that WHO, PROWWESS and all their partners at field level would themselves follow a participatory learning process in the testing of the African PHAST initiative. The development of methods and materials and the training of trainers would be based on the same learning principles that were to be applied at the community level. For example:

- Maximum local adaptation and innovation should be encouraged.
- The initiative should apply an adaptable learning-process approach, rather than lay down a prescriptive set of tools to be followed. This recognizes that those running the initiative do not have the answers and that the project should be experimental and creative.

⁴ PROWWESS stands for the Promotion of the Role of Women in Water and Environmental Sanitation Services. During the International Drinking Water Supply and Sanitation Decade, PROWWESS, a special project under the UNDP, adopted the SARAR methodology as its primary strategy for promoting participation and the involvement of women in water supply and sanitation projects. During the past decade PROWWESS has provided training and programme support to programmes in almost 20 African countries. The work in anglophone Africa, in particular, was intensified in 1990 when PROWWESS began to merge with the UNDP/World Bank Water and Sanitation Program and a SARAR specialist was assigned to work with the eastern and southern Africa Regional Group based in Nairobi. In partnership with the World Bank International Training Network (ITIN) centres — NETWAS in Nairobi and IWSG in Harare — PROWWESS focused on developing national teams of training and participatory development specialists.
- There should be common ownership of the methods and materials produced, with due recognition of the contributions of the various partners in subsequent phases and applications.
- There should be wide sharing among the partners of the lessons learned.
- There should be a core team for each country to coordinate activities, seek financial support and distil the lessons learned.

The selection of countries

Having achieved a meeting of minds and a decision to work together, WHO and PROWESS identified five pilot countries according to the following criteria:

- The existence of a cadre of trained PROWESS individuals.
- At least two or three on-going projects with strong government and, preferably, external donor support.
- Significant opportunity for involvement by nongovernmental organizations (NGOs).
- Commitment to being involved in a carefully documented, collaborative learning project for at least a year, and probably longer.

Kenya, Uganda and Zimbabwe met all of these criteria. PROWESS had been active in Kenya since 1985, Zimbabwe since 1986, and Uganda, more recently, since 1992. Although there had been no previous PROWESS training in Botswana, in response to a strong demand from the Botswanan Ministry of Health, the United Nations Children’s Fund (UNICEF) and the Swedish International Development Cooperation Agency (Sida), it was also invited to participate in the pilot phase. Ethiopia originally intended to participate but was unable to organize a pilot activity due to decentralization of government services. Pilot activities were therefore carried out in only four countries: Botswana, Kenya, Uganda and Zimbabwe.

The 18-month, regional pilot programme was implemented in collaboration with the governments of these countries and in close partnership with UNICEF (particularly in Kenya, Zimbabwe and Botswana) and various regional and national NGOs (for example CARE, KWAHO, WaterAid). The World Bank International Training Network centres (ITNs)\(^5\) played an important role in preparing, coordinating and monitoring the participatory hygiene promotion activities.

Core funding was provided by Sida, through WHO, and by Norway, through a participatory development fund grant to the UNDP/World Bank Water and Sanitation Program. In addition, UNICEF helped sponsor a number of participants to the regional workshops and continues to play a very significant role in the project. Various donors, including the Danish International Development Agency (DANIDA) and Sida, assisted with the funding of activities at country level.

---

\(^5\) The International Training Network for Water and Waste Management (ITN) is a component of the UNDP/World Bank Water and Sanitation Program. ITN centres provide training, disseminate information and promote local applied sector research on low-cost water supply and sanitation options.
In order to encourage maximum national and project-level ownership of the process, the sponsors agreed to fund only the regional and inter-country activities. Participants were expected to generate their own funds for activities within their countries. Although WHO and PROWESS/ RWSG-EA provided ongoing technical support to the process, they tried to maintain sufficient distance so as to encourage a maximum degree of initiative and leadership from their regional and national counterparts. As a consequence, strong ‘core teams’ emerged, with people from various institutions and sectors collaborating to coordinate country training workshops and field implementation.

Two creative workshops

The PHAST programme officially began in September 1993 with a one-week pre-planning workshop held in Nyeri, Kenya. The 12 participants at the workshop included regional and international specialists with an excellent understanding of epidemiological and methodological tools, country-level representatives and artists.

This creative workshop was designed to develop a core set of concept-based tools, methods and materials, which integrated basic epidemiological concepts with SARAR methodology. Seven of the key tools used during the workshop are described here.

Trainers working together to become familiar with PHAST methodology.

Contamination routes: Based on the F-diagram (see next page), this activity uses a set of posters depicting the different steps or carriers of faecal-oral contamination, to help communities analyse and organize their knowledge of diarrhoeal disease transmission. This activity also provides a framework for assimilating new ideas and concepts about faecal-oral contamination

---

6 This tool was originally developed by PROWESS (Ron Sawyer and William Samson) in 1987 for the Rural Sanitation Programme in Lesotho. Prior to the PHAST initiative, adaptations of the tool had been used in Zimbabwe by the country’s Ministry of Health and UNICEF (‘blocking the routes’), by the Yacupaj Project in Bolivia and by the Kumasi Health Education Programme in Ghana.
F-diagram: transmission of diseases from excreta


**Barriers matrix:** Following on from the contamination routes exercise described on the previous page, this activity includes a set of pictures of common barriers (both technological and behavioural) that can be used to ‘block’ any of the principle transmission routes of faecal-oral disease. The matrix includes two variables for classifying the barriers according to their ‘effectiveness’ and ‘practicality’ (that is, ease of application). At the community level the matrix can be substituted by an incremental process of elimination, by first identifying the most effective barriers and then prioritizing these according to their relative applicability¹.

**Sanitation ladder:** This set of posters was designed to help community members to identify their own situation on a scale of various sanitation options and to determine the relative merit and feasibility of varying levels of improvement². The activity is taken one step further by identifying possible obstacles to implementing the proposed sanitation improvements caused by attitude or behaviour.

**Three-pile sorting:** This powerful SARAR tool has been readily adapted to the PHAST initiative. It provides a set of pictures or photographs of hygiene and sanitation-related situations which are sorted according to whether they are considered to be ‘good’, ‘bad’ or ‘in-between’.

¹ The use of the matrix was introduced specifically for PHAST at the pre-planning workshop. Each of the programmes in turn modified the tool according to their own specific purposes. During the December 1994 PHAST review workshop, WaterAid/Uganda made a particularly useful demonstration of the use of the tool for needs identification. The activity was further modified as a ‘tools matrix’ for use in training workshops to analyse the appropriateness of the various SARAR-PHAST participatory techniques and materials.

² This activity was designed by Josiah Omotto during the pre-planning workshop in order to address the concept of incremental, situation-specific improvements – steps in the Sanitation ladder – which has been promoted by the Swedish architect Uno Winblad.
In addition to stimulating a very high degree of community involvement, this activity has proved particularly useful in revealing the depth and breadth of local health-related knowledge and in providing a context for arriving at consensus on appropriate behaviour and sanitation technologies.

**Pocket chart:** The pocket chart is an investigative tool. In the workshop, it was used to tabulate where people defecate or from where they collect water. It can be used as an evaluation tool as well. Tabulations from two different points in time can be compared, such as where people defecated before a hygiene and sanitation project began and then one year later.

**Dr Akili Sana:** This activity helps communities to appreciate the difference between illnesses requiring *curative attention* from health-care providers (either traditional or modern) and health problems which should be addressed through a *preventive strategy* initiated by the community.
members themselves. Water, sanitation and hygiene-related problems generally lie within this latter category.

**Community mapping:** People are encouraged to draw a picture of their community showing its water-supply sources and sanitation facilities. They will often include various environmental problems, such as poor drainage and open refuse. This activity is sometimes used to help communities visualize their overall situation and the situation to which they aspire.

The Kenya pre-planning workshop was followed by a training-of-trainers workshop held in Mukono, Uganda, in October 1993. Participants included experienced trainers of extension workers from the four countries involved. By the end of the workshop the participants had developed their own plans for field application, adaptation and assessment of the hygiene promotion methods. They had also identified the potential for support, in the form of funds or backing from institutions, within each country.

**Field testing**

Participants at the Uganda workshop returned to their respective countries, organized national and district training workshops, further adapted the methods and tools to local situations, and field tested them in at least six sites within each country.

- In Botswana, the approach was piloted in seven districts and 72 extension workers were trained.
- Six districts in Kenya participated and a total of 4,071 community members and extension staff were exposed to PHAST methodology.

---

*This activity was introduced by Keith Wright, a participation specialist, during the pre-planning workshop and has been successfully adapted to various cultural contexts by changing the name of the doctor.*
Uganda involved six districts and successfully included a total of 14,400 community members and extension workers.

Zimbabwe extended its pilot to seven districts, training close to 1,000 extension workers and 3,285 community members.

Not unexpectedly, this adaptive (as opposed to prescriptive), learning-process approach has yielded distinct hygiene-promotion programmes in each of the participating countries, as well as enormous momentum and commitment. Synopses of experiences in pilot countries are provided in Annex A.

Monitoring and evaluation

A central feature of the PHAST initiative was the mechanism put in place for monitoring progress and lessons learned. The system evolved gradually. It included the use of outside documentation specialists as well as inter-country consultations to share progress. By the time of the final workshop to discuss results, only a year later, all of the countries had produced well-documented evidence of the project’s impact at community level and of lessons learned for future projects and programmes. See the diagram on page 14 for a summary of the stages involved in the PHAST initiative.
The PHAST initiative — a summary

February 1993
PHAST initiative is born

Partners
UNDP/World Bank Water and Sanitation Program
WHO
PROWNESS

February-August 1993
Selection of countries:
Botswana
Kenya
Uganda
Zimbabwe

September 1993
Initial PHAST 1 week pre-planning workshop — Nyeri, Kenya

Participants
— Regional/international specialists
— Country-level representatives
— Artists

October 1993
PHAST workshop for training-of-trainers — Mukono, Uganda

Outputs
— Plans for field application
— Sources for funding and back-up support identified

December 1993 – November 1994
Country level field projects
Activities
— National and district level training workshops
— Development of country specific methods and tool kits
— Field testing in 6 or more sites within each country

December 1994
Review workshop — Harare, Zimbabwe
— Presentation of written case-study reports
— Evaluation of progress
— Modification where required and continuation of field initiative

November 1996
Publication of the PHAST initiative report summarizing the outcome and the lessons learnt from the 4 field projects

Future Activities
— Proposed external review of 4 pilot PHAST initiative projects
— Publication of a PHAST step-by-step guide and tool kit for working with communities, and a manager’s guide
— Production of a PHAST video
3. The impact on communities

All four countries participating in the field test gathered in December 1994 at a PHAST review workshop in Harare, Zimbabwe to report and pool their results. As there were many field sites, only a selection of experiences is presented here. However, responses from pilot communities were very positive. The following comment from an 84-year-old Kenyan woman captured the feelings generated. ‘All my life people have been coming here and telling us what to do. This is the first time anyone ever listened to what we think.’

Examples of impact

In one rural community in Zimbabwe, in the space of eight months, 24 latrines which had been left unfinished were completed and 18 family wells were upgraded. In addition, the local environmental health technician noticed that almost twice as many people were attending the meetings he arranged to discuss water, sanitation and hygiene in the village, and they stayed longer than in the past. In fact sometimes he was late for his next appointment because the discussion was so lively and the community members wanted to raise new issues, such as meat hygiene and house construction.

In a school in Botswana a latrine block had recently been built by the government. Hand-washing facilities were provided, but no soap. Teachers and parents decided that this was not acceptable and created a fund to buy soap dispensers and keep them filled with soap. The majority of parents contributed the small sum necessary to make the improvement. The teachers introduced hand washing into their teaching, particularly with the youngest pupils, and helped the children to arrange a cleaning rota to ensure that the latrine block stayed clean.

In a low-income peri-urban artisan community in Uganda, within six months of an initial visit by one field worker, the community built latrines, organized the operation and maintenance of neglected communal drains, collected tariffs to pay for maintenance workers for drains and water points, and organized their own system of monitoring community sanitation. The community adopted the graphic materials and discussion techniques of the field worker in order to continue the process of community development in her absence.

In a village in Uganda the community decided to make a map to track the growing number of family latrines and improved water sources. They asked a local artist to draw their village, marking each household which had built or arranged for the building of a latrine and also showing the water and sanitation problem areas in the village. The map hangs in the headman’s office and is brought out for meetings of the village committee and visits by officials or guests.

In Zimbabwe, one community spontaneously submitted a report to the government department on their water and sanitation situation. They knew that many homes lacked latrines and that the village water sources were
almost all unprotected. They decided they wanted help to change. In the past they had waited for the government extension worker to come, tell them what needed to be done and offer them subsidies, usually in the form of bags of cement. This time they knew what they wanted to do and they were not prepared to wait.

In Kenya, one community held a water and sanitation meeting in the absence of the community extension worker, who had failed to turn up. On her previous two visits the extension worker had used a new methodology to help the community to identify their problems. Now they wanted to go on, with or without her, and they decided to try some of the techniques she had used during her visits.

**Common achievements of the pilot phase**

The programme participants from the four countries involved identified a specific set of results that seemed to be fairly uniform in all of the communities exposed to PHAST:

- They all have self-esteem: a belief in their own ability to solve their own problems. They do not wait for others to find the solutions. They know that what they can do themselves with their existing resources is enough to make a significant improvement to their health and their environment.

- They all have a basic understanding of the health implications of poor water supply and sanitation. They know how some of the diseases they have experienced most frequently are linked to excreta. They understand why these diseases can only be reduced by getting excreta (even children’s excreta) out of the environment, by keeping water safe from contamination and by washing hands.

- They all have a sense of common purpose and a way of planning change in their communities.

- They all have a committed and positive extension worker who is trying to allow them to plan their own future. The extension worker does not have all the answers to a community’s problems but now, can understand how to help communities find the answers. The extension worker finds the work more rewarding and can see its impact. This means a higher level of job satisfaction and a happier worker than ever before.

It should not be forgotten that these communities are in four different countries, speak different languages, are in both rural and urban areas, have a variety of beliefs about health and about water and sanitation, and, while most have low incomes, they have different income levels. Yet, despite their differences, everyday they faced the same problems.

Only one year ago they shared:

- An inadequate supply of safe water close at hand.
- Poor sanitary conditions.
- Hygiene practices which represented a risk to health.
- A common belief that their own poverty or ignorance inhibited them
from making changes to their water and sanitation situation and that someone else should take this responsibility for them.

**The impact on extension workers**

The impact of PHAST on extension workers has been one of the most rewarding aspects of the project.

Participants in the pilot phase have reported that:

- The extension workers respect the community and believe in themselves.
- They have a set of graphic materials that help them to relate to the community in a non-directive way. The community can tell its story and begin planning improvements.
- The one basic workshop they attended gave them the confidence to begin to use and adapt these tools.
- They have opportunities to interact with other extension workers and project staff who share a common vision and have a willingness to learn from common experiences and gain further confidence.
- They have a sense of support from their supervisors, who allow them to explore their own skills, design their own interaction with the community and be involved in the monitoring of this interaction.

All of these positive elements give them the motivation to adopt this new approach, despite receiving no additional remuneration or incentives—other than greater job satisfaction. The extension workers who took part did not want to go back to their former methods of working.
4. The lessons learned

On behaviour change

The SARAR methodology aims at personal growth and participatory development. When applied to sanitation and personal hygiene, it worked well in promoting sustainable behaviour change and community management.

While the SARAR methodology was used in this project to focus on hygiene behaviour change, it also prompted latrine construction and other physical environmental improvements in communities. It encouraged communities to set up their own systems for operation and maintenance, for payment of services and for monitoring household and community behaviour using indicators identified by themselves. Thus, the lesson we have learned is that when people understand the relationship between their environment and their health and well-being, they identify and take the necessary steps to improve the situation. They do not necessarily wish to limit themselves to the behaviour change promoted by the programme. In fact, the programme enables them to move beyond hygiene behaviour by giving them the techniques for improved participation, visualization and communication. As one village chief said: ‘Before you came, our panga (machete) was dull. Now you have helped us to make it sharp again.’ As a result of the programme, people have acquired the generic skills necessary to take their own development forward. Focusing on hygiene behaviour and sanitation, therefore, seems to be a good starting point for stimulating community interest in general environmental improvements and in the factors necessary to sustain improvements, such as operation and maintenance, cost recovery, self-monitoring and evaluation.

The SARAR methodology encourages free, uninhibited expression and enables outsiders to listen better to what communities have to say. Communities know more than outsiders usually give them credit for. The SARAR approach helps outsiders to respect community intuitiveness and resourcefulness.

SARAR works especially well in an environment where resources are poor. It allows communities to decide their own cost-benefit ratio. It helps them determine what they really need and are prepared to pay for, in terms of money, resources and time. Subsidies, we have learned, tend to work as a disincentive to local contributions and initiatives.

On the requirements for success

A participatory programme, aimed at community empowerment, requires certain factors not commonly found in typical water supply and sanitation programmes. These factors are essential for initiating, sustaining and expanding a participatory approach. They can be grouped into three areas.

The institutional environment: An appropriate institutional structure must be established to support a participatory approach. Incentives and rewards
for field workers and engineers must reflect the objectives of the programme. For example, instead of taking the number of hand pumps or latrines installed as the criterion for achievement, success should be judged on the number of communities organized and active in setting and achieving their own goals. The institution will need personnel trained in the PHAST (SARAR) methodology. These people need to be given ample time to work with communities. It should also be recognized that some communities need more time than others to describe their problems, visualize what they need, reach consensus and initiate changes.

**Resources:** A participatory programme needs more than just a sufficient number of personnel. Other essentials include: an assured means of transport or money for fares on public transport; per diems for extension workers spending many nights in communities; and full sets of learning materials. In the field, workers will need funds for paying artists and resources such as paper and photocopiers for duplicating materials. The budget for a programme needs to include an allocation for training workshops on methodology, field travel, artists and materials.

**Policy commitment:** Most importantly, a participatory methodology requires a policy commitment from the very top. Without this commitment, it is unlikely that such an unusual approach, with all of its unique features, can succeed.

**On how to start**

Experience has shown that it is best to begin a PHAST programme with a small pilot project. The PHAST approach requires a period of learning for both programme personnel and the institution involved. Different institutions will be more or less ready for PHAST. For example, some may have a structure and management style that permits and encourages field-worker initiative and experimentation. Others may have a more authoritarian hierarchy.

In terms of materials and personnel, it is possible to make use of existing resources when setting up a PHAST programme. Existing hygiene education materials can be modified or adapted to create graphic tools for community discussion, provided they are culturally appropriate. It is best to plan, at some stage, a small workshop to train a cadre of artists to work in the programme. While it is not necessary to hire new personnel, existing personnel will need training in the methodology. It is also necessary to determine whether the numbers of personnel are enough to cover communities in a reasonable period of time. The PHAST approach does not necessarily require a newer or bigger budget than previous programmes, but it may require shifting budgets from ‘hardware’ to ‘software’. Once done, the communities take a far greater share of the cost of the project than they would have done before.

**On how to sustain**

Backup is most important. Community field workers can sustain a participatory approach once they feel completely comfortable about using it. Until that time they will need periodic visits from supervisors who will
listen to their problems and try to meet their needs. This support is essential for anywhere from three months to one year after the start of the project. Continual monitoring and periodic evaluation of community activities and improvements will provide valuable lessons for sustainability of the approach.

**On how to expand**

Any expansion of a participatory programme must take place slowly, perhaps one district at a time, making sure that each district can sustain what it has achieved before moving on to the next one. Expansion requires political commitment and inviting district political leaders to visit successful sites is usually a good way to achieve this.

**Requirements for successful community management of water supply and sanitation using the PHAST methodology**

- Policy commitment to adopt a participatory strategy
- Institutional structure supportive of a participatory approach
- Adequate resources (not necessarily additional resources) perhaps re-organization of existing resources
- Pilot projects for the development of country specific materials
- Ongoing monitoring and evaluation of progress and impacts
- Back-up support from trainers and supervisors until extension workers feel confident in the PHAST approach

PHAST may require a policy shift among decision-makers. Experience shows that lack of support from supervisors and policy-makers who have not been exposed to the methodology has been the single most difficult obstacle to initiating, sustaining and expanding PHAST. An excellent way to stimulate policy changes is to take decision-makers to pilot sites.
5. The future and the potential of PHAST

The three organizations involved in the development of the PHAST initiative feel that the pilot phase has been very successful and would like to see an expansion of the approach. A step-by-step guide for working with communities and a prototype tool kit using the PHAST methodology are being prepared. A manager’s guide and a set of detailed case studies from the four countries involved in the pilot phase are envisaged for the near future. In 1997 an external review of the four pilot countries is planned to evaluate the impact and sustainability of the approach. It is hoped that these further documents will enable countries not yet exposed to the approach to try it more easily.

The four countries involved in the pilot phase have developed tool kits which can serve as models for new countries wishing to try the approach. Trainers within those countries are available for future training workshops. The two ITNs involved, the Institute for Water and Sanitation Development (IWSD) in Harare and NETWAS in Nairobi, are able to offer training courses in PHAST.

The PHAST approach can be adapted to any culture and can be used equally well with school children in classrooms, in non-formal education classes and in community meetings. Problems with the methodology arise more often from poor training, supervision and support from institutions. The production of artwork can also create a bottleneck. Artists must be identified, trained and paid during an intensive phase of materials development.

To sum up, the future of PHAST depends on inspiring commitment from countries, donor agencies and international organizations. Once begun, it often generates great enthusiasm among those trained, who usually do not want to go back to their former ways of working. Personnel at all levels can observe with great satisfaction the changes brought about as a result of their personal efforts. Thus, while PHAST requires particular efforts to achieve policy shifts, budget shifts, new training methods and new types of educational materials, it appears to bring about the sought-after results and should be considered for future investments.

For more information on PHAST, contact:

WHO
1211 Geneva 27, Switzerland
Tel (41-22) 7912111
Fax (41-22) 7910746

UNDP/World Bank RWSG-EA
PO Box 30577
Nairobi
Kenya
Tel (254-2) 338868
Fax (254-2) 338464

UNDP/World Bank Water and Sanitation Program
1818 H Street, N.W., Room S4-055
Washington D.C. 20433
United States of America
Tel (1-202) 4736917
Fax (1-202) 4770164, 5223228
NETWAS
PO Box 15575
Nairobi
Kenya
Tel (254-2) 890555/58
Fax (254-2) 890554

IWSD
University of Zimbabwe
Box MP422
Mount Pleasant
Harare
Zimbabwe
Tel (263-4) 303288
Fax (263-4) 303280

SARAR Transformación S.C.
A.P. 8, Tepoztlán
Morelos 62520
Mexico
Tel/Fax (52-739) 50364
Annex A
Synopses of experiences in pilot countries

BOTSWANA
Collaboration

Botswana’s PHAST pilot programme was a collaborative activity by the country’s Ministry of Health and Ministry of Local Government, Lands and Housing, UNICEF and WHO. It was supported by funds from the government of Botswana, UNICEF, WHO and the Swedish International Development Cooperation Agency (Sida).

The sequence of events

Initially, in October 1993, six people were trained in the PHAST methodology at the Mukono workshop in Uganda. The Botswana national team was the only team in the four pilot countries that had not had previous exposure to SARAR. As it takes time to develop confidence in the methodology, the Botswana team, more than the others, had to struggle to overcome its lack of confidence while trying to carry out subsequent training of community-level extension workers.

In March 1994, with the support of experienced SARAR trainers from Kenya, Uganda and Zimbabwe, 72 trainers from six regions of the country were trained at two major training workshops, in Kasane (in the north) and Lobatse (in the south). Subsequently, in July and August 1994, district-level staff from Bobirwa and Gaborone were trained. The PHAST approach was piloted in seven community sites, three urban and four rural.

Changes observed in communities

The main achievements observed at community level were as follows:

a) There was full involvement of the community, with everyone participating and contributing in some way.

b) Communities developed confidence in themselves, diagnosed their own problems and felt committed to participating in making changes.

c) Communities came forward with donations of local resources towards activities, planned by themselves, to promote hygiene education and behaviour change.

d) Volunteer community members formed groups, called village health committees, which managed the hygiene education activities for the community in collaboration with school health committees, parent teacher associations, literacy groups and crime prevention groups.

e) There was a definite change of attitude amongst community groups such as village development committees, parent teacher associations, literacy groups and crime prevention groups.
The future of PHAST in Botswana

The Botswana team would like to expand the PHAST approach to more districts. It wants to create a strong, laminated tool kit for wide use and to receive more training in participatory methods. There is a concern that the PHAST initiative may die in Botswana unless a strong, well-placed co-ordinator is assigned soon and the approach institutionalized. Ideally, the team would like to have a United Nations Volunteer, trained specifically in PHAST, to guide, co-ordinate and support its efforts over the next three years of programme development.

KENYA

Collaboration

The Kenya PHAST programme was, and continues to be, a collaborative activity by the Kenyan Ministry of Health, CARE-Kenya, Network for Water and Sanitation (NETWAS), Kenya Water and Health Organization (KWAHO) and UNICEF. Funding for the pilot phase was provided by the government of Kenya, CARE-Kenya, UNICEF, WHO and Sida.

The sequence of events

Initially, twelve people from Kenya attended the Regional Participatory Hygiene Education Workshop in Mukono, Uganda, in 1993 and participated in the development and testing of the prototype materials. Most had had previous exposure to the basic SARAR methodology.

Following the Mukono workshop, training was given to extension staff responsible for piloting and testing PHAST tools in field sites where they had on-going water and sanitation projects.

Pilot testing took place in six districts: Nandi, Baringo, Kisumu, Homa Bay, Siaya and Uasin Gishu.

In order to sustain the momentum of the initiative and to develop tools and indicators for monitoring the experience, several consultations were organized between the PHAST pilot programmes in Kenya and Uganda. These included a consultation in April 1994, a monitoring and evaluation workshop in August 1994, and a Kenya/Uganda PHAST review workshop in November 1994.

Staff in both Kenya and Uganda felt the need for a pool of SARAR-trained artists to call upon to help develop culturally appropriate tools for the varied field settings. As a result, the Participatory Learning Network (PALNET) organized a five-day artists workshop in Maseno, Kenya, in April 1994, which brought together 12 artists and seven resource staff from Uganda and Kenya.

---

1 Most of these organizations are members of the Participatory Learning Network (PALNET) in Kenya. PALNET's purpose is to share experiences and ideas from various participatory methodologies.
Changes observed in communities

Changes observed in Kenyan communities as a result of the application of PHAST tools and techniques were as follows:

a) Communities decided to form health committees.

b) Health committees decided to undertake house-to-house hygiene education.

c) Community leaders requested PHAST tools (in colour) for use in local schools and by local health workers — an indication that community members enjoyed being trained in participatory methods and became competent in their use.

d) Community leaders approached public health officers for information on the technical aspects of latrine building, protection of water sources and healthful housing.

e) Health committees made plans for building latrines. Community members agreed to compile a list of people who did not build or did not use pit latrines and to prosecute such defaulters. As a result, latrine coverage increased.

f) Health committees decided to take over the operation and maintenance of water points.

g) Health committees created a system of community monitoring of water supply and sanitation.

Several of these outcomes, in particular d) to g), demonstrate how PHAST activities contribute directly to the promotion of community management of water and sanitation services.

The PHAST tools and approach generated great interest within other sectors. CARE-Kenya, in particular, used the approach to develop materials and methods for the prevention of AIDS, for youth employment generation, and in the field of agro-forestry.

Even before the end of the pilot phase, the methodology had spread to four new sites and was being tested by an additional major donor-funded programme, the Lake Basin Development Authority.

The future of PHAST in Kenya

The Kenya team has the following objectives for further expansion:

a) To advocate PHAST among water and sanitation implementing agencies and to encourage adaptation of the tools to new sites, including those in the environmental health programme run by the Ministry of Health and funded by Sida.

b) To build up capacity in the methodology at both grassroots and institutional levels, by including PHAST methods in standard training curricula for extension agents.

c) To develop monitoring tools and indicators for determining the progress of the application and use of PHAST.
d) To document and evaluate the application of PHAST country-wide.

e) To hold a PHAST workshop for Ethiopia, Kenya and Uganda to share experiences on progress following the pilot phase.

UGANDA
Collaboration

The major partners in the Uganda PHAST programme are the Rural Water and Sanitation Project (RUWASA) of the government of Uganda, the Katwe Urban Pilot Project (KUPP), WaterAid and the Network for Water and Sanitation (NETWAS).

The sequence of events

In October 1993 the RUWASA Project hosted the Regional Participatory Hygiene Education Workshop in Mukono, Uganda. The six Uganda trainers and two artists who attended the Mukono workshop became the national PHAST core team.

In February 1994, the RUWASA Project, in collaboration with SARAR/PROWWESS training experts from the UNDP/World Bank Regional Water and Sanitation Group in Nairobi, carried out PHAST training for its central staff and a core team of social mobilizers. The Katwe Urban Pilot Project and WaterAid participated in the training course.

The PHAST approach was piloted in Mukono district and, on the strength of its success there, the methodology was extended to cover the other districts where RUWASA is active (Jinja, Iganga, Tororo, Pallisa and Kamilii). The training was not limited to hygiene education and sanitation, but included other areas of rural development dealt with by social mobilizers. Participants appreciated the value of the methodology and determined to train all district officers and community social mobilizers within their projects in the methods.

It was found that an important outcome of using this methodology was that the water-user committees and other community members were able to participate actively in discussions related to sanitation, hygiene behaviour, water-source maintenance, gender and planning. The use of illustrations facilitated and generated discussion.

Following the February 1994 training workshop, WaterAid organized two PHAST workshops for project teams, held in Mbewa and Mbaale. These teams continue to use PHAST methods for the promotion of hygiene and sanitation.

PHAST was tested in just one urban site, the Katwe Urban Pilot Project (KUPP) in the city of Kampala. Here, five extension workers and 20 community members were trained in the methods. In both the WaterAid and KUPP programmes, community members are trained to train others.

Changes observed in communities

In the rural areas of Uganda, field workers had always had difficulty helping communities to prioritize their problems. However, with the use of
PHAST tools, it became easier for communities to focus on water and sanitation-related diseases as a main priority. Both field workers and community members appreciated that these participatory methods were superior to the ones they had used in the past.

Major achievements of the PHAST initiative in rural areas were as follows:

a) Communities became willing to pay money for operation and maintenance of their water points.

b) Communities became increasingly committed to the concept of community management.

c) Communities requested extension agents to visit more often and, when they came, attendance at meetings increased.

d) Communities had an increased appreciation and understanding of the value of water supply and sanitation facilities. This resulted in increased numbers of latrines and the installation of more hand-washing facilities.

e) Communities wanted to monitor and evaluate their progress and designed billboards to monitor the hygiene practices and sanitation status of their communities.

f) Communities requested to be given copies of the tools to use for mobilization of other community members.

In the urban site, the Katwe Urban Pilot Project, a great deal of success was also achieved. The Katwe project is seeking to improve environmental conditions in a largely artisan peri-urban community. The field workers used the PHAST methods to stimulate community involvement, to raise awareness about health risks and to set in motion some planning and action. At first the community, mostly men, was resistant even to meeting with field workers. However, little by little, community members began attending meetings and using the graphic materials to discuss their problems.

This resulted in the formation of four community-organized groups, trained in participatory tools and with the task of mobilizing the community and raising awareness of proper hygiene, sanitation, waste disposal and drainage. Within a few months latrines had been built, drainage improved and garbage collection instituted. The groups also embarked on income-generating activities.

**The future of PHAST in Uganda**

Following the December 1994 PHAST review meeting in Harare, where the four countries involved in pilot testing shared their results, RUWASA has expanded its use of participatory tools to the training of others involved in its projects. These include: community health workers; primary-school teachers, school management committees and parent teacher associations; communication campaign teams; and tutors at the School of Hygiene in Mbale and the School of Social Development in Nsamizi.
The various partners in the PHAST pilot project in Uganda have agreed on three lessons learned. First, the PHAST approach is costly in financial terms but certainly worthwhile when one considers the changes stimulated in communities. Second, institutional support, at every level, is vital to success at field level. Third, communities can monitor and evaluate their own hygiene status, creating the monitoring mechanisms best suited to themselves.

**ZIMBABWE Collaboration**

The Zimbabwe PHAST pilot programme was initiated at the request of the Department of Environmental Health of the Zimbabwe Ministry of Health. The programme was, and continues to be, a collaborative effort by the Ministry of Health, UNICEF and the Institute of Water and Sanitation Development (IWSD). Although the bulk of the funding was provided by the government of Zimbabwe, UNICEF and Sida, support for the initiative has also come from a number of other institutions, including the Rural District Councils (RDCs), Agricultural Technical and Extension Services (Agritex), Ministry of National Affairs, Employment Creation and Cooperatives (MNAECC), Africare, PLAN International, Mvurumanzi Trust and the Lutheran World Federation.

**The sequence of events**

Following a pre-planning workshop facilitated by a PROWWESS specialist from the UNDP/World Bank Regional Water and Sanitation Group in Nairobi, a national PHAST training workshop was conducted at Meteeric, Masvingo, in March 1994.

Initially, in order to test the approach, three pilot districts were selected for their ethnic and geographical diversity. These were two Ministry of Health programme districts supported by Sida, Goromonzi and Mutasa, and the UNICEF project area of Beitbridge. Beitbridge is in the semi-arid region of Zimbabwe near the South African border, whereas the Goromonzi district, just outside Harare, is in an area with above-average rains and plenty of surface and perennial underground water, which has contributed to a high incidence of water-related diseases.

A special focus of the Goromonzi programme was the use of PHAST training in tandem with the Mvurumanzi Trust’s programme to upgrade family wells. The Health and Hygiene Education in Schools project has also used a number of PHAST tools.

In June 1994 a first review workshop was held to identify indicators and to develop a monitoring plan. A second review workshop was held in November 1994, prior to the regional PHAST review workshop in Harare.

Within very little time demand for the methodology increased outside the pilot districts and within the first year the methodology had spread to four more districts. The approach was also highlighted at the UNICEF regional sanitation workshop in October 1994.
Changes observed in communities

In the eight months between the PHAST training workshop in March 1994 and the review workshop in November, the most important achievements were related to the management and implementation of the programme itself. It was agreed that community-level changes would have to be reviewed at a later time. However, one important achievement has been that communities can develop their own system for monitoring and evaluating hygiene and sanitation changes.

The future of PHAST in Zimbabwe

As from mid-1995, the PHAST approach has been institutionalized in Zimbabwe and is now an official Ministry of Health programme. UNICEF has been actively supporting the Ministry of Health in the use of PHAST and has been garnering additional external support for the approach. Within the country, all provincial water and sanitation sub-committees have been trained in the PHAST methodology. Nearly one thousand extension workers are now trained. The Ministry of Health is currently producing a PHAST field guide for national use.
Annex B
List of collaborating institutions

Botswana: Ministry of Health, Ministry of Local Government, Lands and Housing

Kenya: Ministry of Health, CARE-Kenya, Kenya Water and Health Organization (KWAHO)

Uganda: Ministry of Health, Ministry of Natural Resources, Energy and Minerals, Rural Water and Sanitation Programme (RUWASA), Katwe Urban Pilot Project (KUPP), WaterAid

Zimbabwe: Ministry of Health, Department of Environmental Health, Rural District Council (RDC), Agricultural Technical and Extension Services (Agritex), Ministry of National Affairs, Employment Creation and Cooperatives (MNAECC), Africare, PLAN International, Mvuramanzi Trust Zimbabwe, Lutheran World Federation

World Health Organization (WHO)
UNICEF Botswana, Kenya, Uganda and Zimbabwe
UNDP/World Bank Water and Sanitation Program, Nairobi (PROWWESS)
Network in Water Supply and Sanitation (NETWAS)
Institute of Water and Sanitation Development (IWSD)
Swedish International Development Cooperation Agency (Sida)
Danish International Development Agency (DANIDA)
Annex C
List of persons involved in the PHAST pilot phase

Botswana
Ms Maria BARWABATSILE
District Adult Education Officer
Non-Formal Education
PO Box 100
Tsabong

Mr Howard M. CHILUME
Social Worker
CDC
PO Box 334
Bobonong

Dr W.M. CHIOMBA
SDMO/DHT
Private Bag 0015
Ghanzi

Dr V.G. CHIPFAKACHA
SDMO/DHT
Private Bag 0012
Bobonong

Ms Tuduesto CHRISTOS
Environmental Health Officer
Health Services
Private Bag 00269
Gaborone

Ms Reginah M. GABORONE
DHENO
Gaborone City Council
Private Bag 0089
Gaborone

Dr V.D. GEORGE
SDMO/DHT
PO Box 20
Kasane

Mr Peter GUMBEL
Sida
Private Bag 0017
Gaborone

Mr T. GWABA
Non-Formal Education
Cdc
PO Box 483
Bobonong

Mr Gerhardus HATTIE JANSEN
Deputy Headmaster
Mphuthe CESS
Kweneng West Sub-district
Private Bag 002
Lethakeng

T. HETLAND
Ministry of Local Government
Lands & Housing
Private Bag 0052
Gaborone

Mrs Doreen IPOTSENG
Education Secretary
Kgalagadi District Council
Private Bag 005
Tsabong

Mrs Rejoice KAKETSO
SEN/Registered Midwife
Department of Health
Southern District Council
Molapowaboeng Clinic
Private Bag 2
Kanye

Mr C. KEBALEFETSE
CHN/DHT
Private Bag 0015
Ghanzi

Ms Tlamele KEDIKILWE
NRSP Coordinator
Ministry of Local Government
Lands & Housing
Private Bag 006
Gaborone

Ms Kentse KEGAKILWE
Senior Health Assistant
Family Health Division
PO Box 992
Gaborone

Mr Oukame KELAENG
Environmental Health Officer Tutor
Institute of Health Services
PO Box 985
Gaborone

Ms Betty KGOMOCHABA
Senior Enrolled Nurse
Ngwaketse East
Private Bag 2
Kanye

Ms Thutego KNUDSEN
MCH/FP Officer
Family Health Division
PO Box 992
Gaborone

Mr Gregar M. LEPANG
Environmental Health Officer
DHT
PO Box 20
Kasane

Mr Uyapo MAFUNYE
Youth Officer
Kweneng District Council
Private Bag 003
Lethakeng

Mr N. MAKHONDO
CHN/DHT
PO Box 20
Kasane

Mr M. MAKOLO
Artist
Information & Broadcast
Dept. of Information
Private Bag 0060
Gaborone

Dr Deowatus Riga Buneke
MALANGUKA
SDMO/DHT
Lethakeng

Mr Victor MANGALISO MAMBA
Public Health Officer
Gaborone City Council
Private Bag 0089
Gaborone

Ms Ntesang MANTU
Secretary
UNICEF
PO Box 20678
Gaborone

Mr Kwezi MBONINI
DHENO/DHT
PO Box 512
Bobonong

Mr Lewis MBWILO SIMBEYA
Senior Health Inspector
Kweneng District Council
Lethakeng Sub-district
Private Bag 003
Lethakeng

Dr Gideon MDUMA
Senior District Officer
Private Bag 005
Tsabong
Mrs Khutsafalo MODISI  
National ARI Programme  
Coordinator  
Family Health Division  
PO Box 992  
Gaborone

Mr Ringo MOGOTSi IPOTSENG  
Chief Community Development  
Officer  
Kgalagadi District Council  
Private Bag 005  
Tsabong

Mr Christopher MOHWASA  
WHEP Coordinator  
Family Health Division  
PO Box 992  
Gaborone

Mr Ookame S. MOLAPISI  
DAOC/GDC  
PO Box 148  
Ghanzi

B.B. MÖTLADIILE  
MOH/FHD  
PO Box 992  
Gaborone

Mr Tshegabaco MOTSEMME  
Head, Environmental Health  
IHS  
PO Box 985  
Gaborone

Mrs Tshegabaco MOTSEMME  
Control of Diarrhoeal Diseases  
Officer  
Family Health Division  
PO Box 992  
Gaborone

Mrs Grace MPOLOKANG  
MOHURTSHE  
Headteacher  
Department of Teaching & Management  
PO Box 16  
Lethakeng

Mr Blessing MUTANGABENDE  
Health Inspector  
Kgalagadi District Council  
PO Box 2  
Hukuntsi

Mrs Ndiza NLEYA  
A.D/Headteacher  
Tshwaramago Primary School  
PO Box 979  
Gaborone

Mr E. NTÉMA  
Community Health  
IHS  
PO Box 684  
Molepolole

Mrs Othilia T. PHUMAPHI  
Senior Lecturer  
Institute of Health Sciences  
PO Box 684  
Molepolole

Mr Bathusi REGOENG  
Social Worker  
Gaborone City Council / S&CD  
PO Box 305  
Gaborone

Mr Phodiso SEEMA  
Assistant Programme Officer  
UNICEF  
PO Box 20678  
Gaborone

Mr Morgan O. SEGOKGO  
Senior Environmental Health  
Officer  
DHT  
Private Bag 0015  
Ghanzi

Mr Moses SEGOTLONG  
Non-Formal Education Officer  
Adult Education Unit  
Ministry of Education  
PO Box 113  
Kasane

Mr Kodise SELOTLEGENG  
Ministry of Local Government  
Land & Housing  
Private Bag 006  
Gaborone

Mrs Mphe TEBELE  
DHENO  
Kgalagadi District Council  
Private Bag 005  
Tsabong

Mr Gibson SINKAMBA  
FHD/HEU  
PO Box 992  
Gaborone

Mrs Even VUMBU  
CHN  
Lethakeng Sub-District  
Private Bag 003  
Lethakeng

Congo  
Dr T.R. TSHABALALA  
World Health Organization (WHO)  
PO Box 6  
Brazzaville

England  
Ms Astier ALMEDON  
Medical Anthropologist  
London School of Hygiene and  
Tropical Medicine (LSHTM)  
Dept. of Epidemiology & Pop’n  
Sciences  
Keppel Street  
London WC1E 7HT

Ms Lucy J. CLARKE  
5C Milton Road  
Highgate  
London N65QD

Mr Keith WRIGHT  
Intermediate Technology Develop-  
ment Group (ITDG)  
Myson House, Railway Terrace  
Rugby CV21 3HT

Ethiopia  
Mr Yitgeessu ALEMU  
Enviromental Health Trainer &  
Advisor  
Environmental Health Unit  
Ministry of Health  
PO Box 5504  
Addis Abeba

Mr Tesfome REGASSA  
Dept. of Environmental Health  
Ministry of Health  
PO Box 8484  
Addis Abeba

Ghana  
Ms Beatrice SAKYI  
Health Education Officer  
Ghana Water & Sewerage  
Corporation  
Div. of Community Water &  
Sanitation  
PO Box 767  
Kumasi

Kenya  
Mr Khamis Chome ABDI  
Deputy Director  
Kenya Water for Health  
Organization (KWAHO)  
PO Box 61470  
Nairobi
Ms Isabella ASAMBA  
LBDA  
Kisumu

Mr William CHEBU  
Public Health Technician  
Ministry of Health  
Baringo District  
PO Box 21  
Kabarnet

Mr Budd CRANDELL  
Water Sanitation & Health  
Programme Coordinator  
CARE Kenya  
PO Box 88  
Kisumu

Mr Matthew KARIUKI  
Director  
NETWAS  
PO Box 15575  
Nairobi

Ms Celesine A. IDEWA  
Assistant Programme Officer  
Kenya Water for Health Organization  
PO Box 6200  
Kisumu

Mr James KIBOS  
District Public Health Officer  
Ministry of Health  
PO Box 21  
Kabarnet

Mr Charles KUT  
Graphic Artist  
CARE  
PO Box 88  
Kisumu

Ms Rose LIDONDE  
Assistant Programme Officer  
World Bank Water & Sanitation Group  
PO Box 30577  
Nairobi

Ms Jacinta MACHARIA  
Editor  
HLMP  
Ministry of Health  
PO Box 30195  
Nairobi

Ms Mary MUNANO  
NETWAS  
PO Box 15575  
Nairobi

Mrs Margaret MWANGOLA  
Executive Director  
KWAHO/PALNET Chairperson  
PO Box 61470  
Nairobi

Ms Salome MWENDAR  
Project Officer  
Water & Environment Sanitation  
UNICEF  
Box 44145  
Nairobi

Dr Halima MWENESI  
Health Planning & Evaluation Consultant  
PO Box 61075  
Nairobi

Mr Taffy T. Ole NAISHO  
Designer  
Communication Concepts  
PO Box 21156  
Nairobi

Mr Ndiba NJENGA  
Division of Environmental Health  
Ministry of Health  
PO Box 30016  
Nairobi

Mr Nicky NZIOKI  
Research Coordinator  
CREUMHS  
PO Box 48974  
Nairobi

Mr Paul OBURA  
Public Health Technician  
LBDA  
Rabour

Ms Willhelmina ODUOL  
University of Nairobi  
Nairobi

Mr Josiah OMOTTO  
Participatory Development & Training Officer  
SHEWAS/Crush  
CARE  
PO Box 88  
Kisumu

Ms Florence OSODO  
Health Promotion Officer  
NDHEWAS Project  
CARE Kenya  
PO Box 526  
Homa Bay

Mr Isaac RUTTOH KIPKEMBOI  
District Public Health Officer  
Ministry of Health (MOH/GOK)  
Nandi District  
PO Box 5  
Kapsabet

Mr Joseph TUBULA  
Div. of Health Education  
Ministry of Health  
PO Box 30016  
Nairobi

Mr Joseph M. WAITHAKA  
Senior Public Health Officer  
Division of Environmental Health  
Ministry of Health [MOH/GOK]  
PO Box 30016  
Nairobi

Mexico

Ms Alicia SAWYER  
SARAR Transformación S.C. Artist  
A.P. 8, Tepoztlán  
Morelos 62520

Mr Ron SAWYER  
SARAR Transformación S.C.  
A.P. 8, Tepoztlán  
Morelos 62520

Mozambique

Ms Julioeta FELICIDAD  
Coordinator  
c/o UNICEF  
Case Postale 4713  
Maputo

Switzerland

Dr Mayling SIMPSON-HEBERT  
Rural Environmental Health  
Division of Operational Support in Environmental Health  
World Health Organization  
1211 Geneva 27

Tanzania

Mr Ken MASKALL  
Consultant  
c/o UNICEF  
Dar-es-Salaam

Ms Sue MASKALL  
Consultant  
c/o UNICEF  
Dar-es-Salaam

Mr Christian ODHIAMBO OTHIENO  
Resident Advisor Mpwagwa  
WaterAid  
PO Box 2190  
Dodoma

Mr B.E.N. OKUMU  
WaterAid  
PO Box 2190  
Dodoma
Uganda
Ms Christine ACHIENG
Graphic Artist
RUWASA Project
Ministry of Natural Resources
PO Box 20026
Kampala

Mr Zachary BIGIRIMANA
c/o AMREF/Uganda
PO Box 10663
Kampala

Mr William FELLOWS
Programme Officer
UNICEF
PO Box 7047
Kampala

Mr Bob MUGISHA
Graphic Artist
Ministry of Environment (M.O.E.)
PO Box 75
Mukono

Mr David MUKAMA
Hygiene Education Supervisor
RUWASA Project
Ministry of Natural Resources
PO Box 20026
Kampala

Ms Santa OBONGONYINGE
WEF Officer
c/o UNICEF
PO Box 7047
Kampala

Ms Marcela T. OCHWO
Community Management Advisor
Katwe Urban Pilot Project (KUPP)
Kampala City Council
PO Box 46
Kampala

Mr John King Otiema ODOLON
Information, Education and Training Officer
RUWASA Project
Ministry of Natural Resources
PO Box 20026
Kampala

Mr John PINFOLD
WaterAid
PO Box 11759
Kampala

Mr Patrick TAJJUBA
Hygiene & Sanitation Officer
RUWASA Project
Ministry of Natural Resources
PO Box 20026
Kampala

Mr Wilson WAMIMBI
Training Officer
RUWASA Project
Ministry of Natural Resources
PO Box 20026
Kampala

United States of America
Ms Wendy WAKEMAN
PROWNESS
UNDP/World Bank Water and Sanitation Program
The World Bank
1818 H. Street, N.W.
Washington DC 20433

Zimbabwe
Ms Therese DOOLEY
UNICEF
PO Box 1250
Harare

Mr Jameia DUBE
Senior Tutor
Domboshawa Training Centre
PO Box 7746, Causeway
Harare

Mrs B. DUPWA
Africare
PO Box 308
Harare

Mr D. JENJE
Environmental Health Technician
Private Bag 7133
Mutare

Mr S. KHUPE
Ministry of Health & Child Welfare
PO Box 441
Bulawayo

Mr B. MAJAYA
Monitoring Officer
Ministry of Local Government
Rural & Urban Development
Private Bag 7706, Causeway
Harare

Mr M.L. MAPURANGA
Principal Environmental Health Officer
PO Box 323
Mutare

Mr P. MASIMBA
Environmental Health Technician
Ministry of Health & Child Welfare
PO Box 18
Acturus

Mr D. MATURA
Senior Environmental Health Technician
Chikwakwa Hospital
Private Bag 2079
Shamva

Mr Sam MAWUNGANIDZE
Chief Hygiene Education Project UNICEF
PO Box 1250
Harare

Mr A. MBOKO
Senior Environmental Health Officer
PO Box 660
Causeway

Mr L. MUKODZANI
PMD Marondera
PO Box 10
Marondera

Ms Noma MUSABAYANE
Institute of Water & Sanitation Development (IWSD)
University of Zimbabwe
PO Box MP 422, Mt Pleasant
Harare

Mr C. MUSARA
District Environmental Health Officer
Makumbe Hospital
PO Box 8120, Causeway
Goromonzi District

Mr S. MUSINGARABWI
Director
Environmental Department
PO Box CY 1122, Causeway
Harare

Mr J. MUTAURWA
Ministry of Health & Child Welfare
PO Box CY 1122, Causeway
Harare

Mr T. MUDANGWE
Senior Environmental Health Technician
Private Bag J7133
Mutare

Mr A. MWANZA
Senior Environmental Health Officer
Private Bag J7133
Mutare

Mr L. NARE
Ministry of Health & Child Welfare
PO Box 441
Bulawayo
Mr C. NCUBE  
Environment Health Technician  
Beitbridge Hospital  
PO Box 57  
Beitbridge

Mr D. NCUBE  
Environment Health Officer  
Beitbridge Hospital  
PO Box 57  
Beitbridge

Mr G. NCUBE  
Environment Health Technician  
Beitbridge Hospital  
PO Box 57  
Beitbridge

Mr W. RUKASHA  
Ministry of Health & Child Welfare  
PO Box CY 1122, Causeway  
Harare

Mr Paul TAYLOR  
Director  
Institute of Water and Sanitation Development (IWSD)  
University of Zimbabwe  
PO Box MP 422, Mt Pleasant  
Harare
Annex D

Participatory approaches to water and sanitation change: the roles of PROWWESS and SARAR

What is PROWWESS?

For a long time it has been recognized that women are the principal collectors, managers and often users of water in the home. They are also frequently the guardians of household hygiene and family health. Water collection and use and environmental sanitation may dominate women’s daily lives, yet often they are denied a real role in decision-making about water and sanitation.

The PROWWESS programme was created in 1983 to redress this situation. Its goals have been ‘to demonstrate how women can be involved, the benefits this will bring to women and their communities and how this experience can be replicated’2. PROWWESS stands for Promotion of the Role of Women in Water and Environmental Sanitation Services. Initially the programme was based in the United Nations Development Programme (UNDP), Division for Global and Interregional Programmes (DGIP). Later, in 1990, the programme joined the UNDP/World Bank Water and Sanitation Program.

The PROWWESS programme realized that mechanisms were needed to allow women to participate fully in decision-making about water and sanitation and to plan and monitor change. Many mechanisms for bringing about discussion and stimulating involvement and action were examined. It was felt that the SARAR methodology, which had originally been developed by Iyra Srinivasan, working with Ron Sawyer, Jacob Pfohl and Chris Srimi Vasan, would be particularly effective in achieving these goals. SARAR has been a cornerstone of PROWWESS efforts to promote community participation, and particularly women’s participation, in water and sanitation development.

What is SARAR?

As thinking in development, and in health, has evolved it has been recognized that sustained change at community level cannot be achieved without real commitment from and involvement of the community. It is considered that development must respond to the needs felt by the community and that not only should users be involved in the development process but they should choose, manage and own the facilities or services created. This is participatory development.

Participatory methodologies were developed to facilitate this process. The underlying principle is that the best way to promote change is to offer communities ways to take more control of their own development.

methodology is the methods and techniques which allow this to take place. Participatory methodologies are not a universal panacea; many have been criticized as extractive techniques which seek to generate cheap labour rather than to empower people. They are sometimes confined to use with communities, rather than being applied at all decision-making levels. Equally, techniques intended to be participatory can be used didactically by community workers who have received inadequate training.

SARAR is a participatory methodology, developed since the 1970s, which has shown itself to be effective in enabling people to identify their problems, plan for change and implement and monitor that change. It is based on the philosophy of participatory development, the main beliefs of which are that:

- a high level of personal involvement in decision-making is the root of real, long-term commitment to change;
- people closest to the problem are the best ones to find the solution;
- self-esteem is a prerequisite to decision-making and follow-through;
- sustainable learning takes place best in a group context, which contributes to a normative shift;
- learning should be fun.

The SARAR techniques are not teaching tools which seek to impart knowledge. They are methods which seek to foster discussions among households and communities. SARAR uses visual materials and role play to facilitate the process. Trainers are trained and then, in turn, train community workers. They learn to use and adapt a series of tools which generate discussion and assist planning. Most importantly they rethink their interaction with the community. They begin to see the community as a source of wisdom — as a group that, when helped to identify its problems and to plan for change, is capable of acting independently to make the desired changes. In water and sanitation programmes, demand for and uptake of services has been seen to increase significantly, as has spontaneous action by the community to construct or upgrade latrines.

SARAR stands for Self-esteem, Associative strengths, Resourcefulness, Action-planning and Responsibility: the five human qualities that the methodology seeks to promote. Planners and community workers can choose to make women a particular focus, but the methodology is relevant to all community members, male and female, young and old. SARAR has been used in programmes addressing a wide range of health or development issues besides water and sanitation, including HIV prevention, diarrhoeal disease control and nutrition.

The implications of using SARAR

The implications for goals: Using the SARAR methodology means accepting that people may well identify problems other than those the trainer or manager hoped to focus on. As trainers and policy-makers, we have to ask ourselves whether we can be honestly open-ended in our approach and at the same time hope to generate an increased demand for the
particular services our sector offers. We cannot begin with a fixed idea of what the outcome will be. This may mean that different sectors have to coordinate the efforts in relation to the community and allow for multi-sectoral initiatives.

The implications for programmes: In order to be able to use SARAR, community workers need training and support. They also need time to interact fully with the community. As communities begin to take initiatives for their own development they will need further support. This may mean credit to purchase the materials they need, for example. Traditional systems of supply of facilities will no longer be relevant.

The implications for monitoring: Allowing people to define their development agenda and to plan for change takes time: annual coverage goals may no longer be a relevant way to monitor change. The programme must necessarily begin slowly and accelerate over time.

The political implications: The SARAR methods allow communities to improve planning skills. This is empowerment and has considerable political implications. Before applying an approach such as SARAR, community workers and policy-makers must decide whether they are ready to hand some of their traditional control over resources and decision-making to the community.

How to find out more about PROWWESS and SARAR

To find out more about gender issues in water and sanitation development, contact:

Wendy Wakeman at PROWWESS. She can be reached at the UNDP/World Bank Water and Sanitation Program, The World Bank, 1818 H Street NW, Washington DC 20433 USA.

The following books and tool kits provide further information about SARAR:


This is perhaps the best-known publication about working with SARAR. It is distributed through PACT, Inc., 777 UN Plaza, New York, NY 10017, USA (Tel (+1) 212-6976222), price: US$17.95. A video is also available (manual and video together priced at US$45.95).


This publication includes a tool kit and guidebook. The guidebook contains a useful list of participatory trainers. Available from the World Bank Book Store, as above.
Other tool kits have been prepared nationally, particularly through the WHO/UNDP-World Bank/UNICEF PHAST initiative. To find out whether such a tool kit exists in your country or region write to the nearest World Bank International Training Network centre or SARAR NGO (see below).

Five NGOs have been established to assist groups who want to use SARAR in their programmes. They may be able to provide guidance on developing a programme, on obtaining training support or on developing a tool kit. For further information contact:

Lyra Srinivasan
SARAR International
757-A Heritage Hill
Somers, NY 10589
USA
Tel (1-914) 276 2281

Jake Pfohl (Asian focus)
82 Charles St. 1E, New York, N.W. 10014, USA
Tel (1-212) 727-0080
Fax (1-212) 727-7989
E-mail jakepf@aol.com

Ron Sawyer (Latin American and African focus)
SARAR Transformación SC
A.P. 8, Tepoztlán, Morelos 62520, Mexico
Tel/Fax (52-739) 50364
E-mail rsawyer@laneta.apc.org

Network for Water and Sanitation (NETWAS)
PO Box 15575
Nairobi, Kenya
Tel (254-2) 890555/6/7/8
Fax (254-2) 890554
E-mail netwas@ken.healthnet.org

Institute of Water and Sanitation Development (IWSD)
University of Zimbabwe
PO Box MP 422
Mt Pleasant
Harare, Zimbabwe
Tel (263-4) 303288
Fax (263-4) 303280