# PARTICIPATORY DEVELOPMENT TOOL KIT

Training Materials for Agencies & Communities

Deepa Narayan

and

Lyra Srinivasan





Maria de la Maria della Maria

# PARTICIPATORY DEVELOPMENT TOOL KIT

Training Materials for Agencies & Communities

Deepa Narayan

and

Lyra Srinivasan

Copyright © 1994
The International Bank for Reconstruction and Development/The World Bank
1818 H Street NW
Washington, DC 20433
USA

All rights reserved Manufactured in India First printing April 1994

**Deepa Narayan** until recently managed the PROWWESS (Promotion of the Role of Women in Water Supply and Sanitation) Program of the UNDP-World Bank Water and Sanitation Program. She is currently working on social analysis, gender, and participation issues in the Social Policy and Resettlement Division of the World Bank's Environment Department.

**Lyra Srinivasan** served as the Training Director for PROWWESS. She is an adult education specialist who has worked as an independent advisor to UNDP, UNICEF, FAO, the World Bank, and national and international NGOs.

This guidebook accompanies training materials that make up the Participatory Development Took Kit.

The findings, interpretations, and conclusions expressed in this tool kit are entirely those of the authors and should not be attributed in any manner to the World Bank, to its affiliated organizations, or to members of its Board of Executive Directors or the countries they represent.

The material in this publication is copyrighted. Requests for permission to reproduce portions of it should be sent to the Office of the Publisher at the address shown in the copyright notice above. The World Bank encourages dissemination of its work and will normally give permission promptly and, when the reproduction is for noncommercial purposes, without asking a fee. Permission to copy portions for classroom use is granted through the Copyright Clearance Center, 27 Congress Street, Salem, Massachusetts 01970 USA

## **CONTENTS**

Preface ~		vii
Acknowle	edgments ——————	—— ix
Introduction — — — — — — — — — — — — — — — — — — —		
Participatory Activities———————————————————————————————————		7
. 1	Cup Exercise —	0
1. 2.	Johari's Window	
2. 3.	SARAR Resistance to Change Continuum	
3. 4.	Three Squares Evaluation ————————————————————————————————————	
5.	Photo Parade	
5. 6.	Force-Field Analysis	
7.	Unserialized Posters	
7. 8.	Flexi-flans	
9.	Map Making —	
	Pocket Chart-Water Use	
	Gender Analysis-Access to Resources	
12	Task Analysis by Gender—————	30
	Women's Lives-Needs Assessment———	
	Women's Time Management —————	
	Critical Incident Analysis	
	Three-Pile Sorting Cards-Hygiene Practices-	
	Contamination Routes —	
	Story with a Qap——————	
19.	Pump Repair Issues ——————	44
20.	What is Poverty? Who is Poor?	<del> 46</del>
	. Water Group Functioning-Three Star Game—	
	Understanding the Decision-making Process -	
23.	Women's Confidence	<del> 52</del>
24.	Open-ended Snakes and Ladders	54
25.	Monitoring Forms	<del> 5</del> 6
About PR	OWWESS and the UNDP-World Bank Water	
	nitation Program————————————————————————————————————	59
Participat	ory Materials and Trainers—————	<u> </u>
Activities	and Materials Development	69

#### **FOREWORD**

It is increasingly accepted that the effectiveness of efforts to alleviate poverty will be significantly enhanced by the active engagement of the people and communities affected at all stages in the process. But even while development practitioners are recognizing that the ingenuity and experience of the poor constitute a rich pool of assets, they are also realizing that tapping into this pool will require new approaches and new skills.

The last fifteen years have seen dramatic and accelerating movement within the water and sanitation sector toward empowerment of people and direct support for community action. The PROWWESS Program and the UNDP-World Bank Water and Sanitation Program have been leaders in this movement. They have originated and tested innovative approaches and found that participatory materials and activities both permit and encourage users and other stakeholders to make far-reaching and complex decisions. Participatory methods by themselves do not solve all problems. But in combination with an enabling policy environment and active support from program managers and staff, materials like those contained in this kit can help to shift control and ownership of development to beneficiary households and communities.

The materials and activities in this kit have evolved from more than a decade of pioneering field experience around the world. Their wide dissemination signals growing awareness that people's participation is central to sustainable development. Their use will contribute to the larger mission of helping the poor exercise leadership in improving the quality of life in their own communities.

Ismail Serageldin Vice President

-murklyelli

**Environmentally Sustainable Development** 

#### **PREFACE**

Community participation in decision making is now accepted as critical in creating local ownership of policies, programs, and projects.

Three basic premises underlie the participatory approach. First, development is about people, human well-being, dignity, and respect. The greatest of all development resources are people themselves, and their creativity, ingenuity, desires, values, caring, and motivation. Hence, development succeeds to the extent that people's well-being has been enhanced. Second, to be sustainable, development must utilize processes that enhance the capacity of individuals and groups to initiate action to improve their own situation. Third, in order to have a significant impact, participatory approaches must be accompanied by institutional reform supportive of local initiative.

By engaging people in problem-solving activities relevant to their immediate environment, participation creates ownership, builds people's confidence in themselves, and taps into local knowledge, information, and expertise. As development practitioners, one of our greatest challenges is to train people in participatory modes of interaction, and to disseminate materials to support participatory processes.

Experience gained in many countries shows that the acceptance and use of participatory processes is essential to achieve sustainable development. However, without tools and materials to support participatory approaches, wishes do not translate into reality.

This tool kit of visual materials was prepared in response to the repeated demands from people working in the field for materials that can help decision makers, project staff, training institutes, trainers and

artists initiate the process of developing their own local materials to address their specific concerns. While the need for greater access to this material is clear, we hesitated for some time in putting out a global tool kit for three main reasons.

First, because development is rooted in the social, cultural, economic, and political context of societies and its institutions. visual materials should be a reflection of these realities and hence, of necessity, are location-specific. Can a global tool kit, then, serve a useful purpose? After much field experience, we have concluded that the answer is "yes." Over the last ten years, we have found that participatory training is more likely to take root and spread if local trainers and artists have some visual materials to spark their imaginations and, in some sense, to use as models. Just reading about a "pocket chart" is not sufficient; seeing and handling one makes all the difference in understanding the material, its applications, and possible uses.

Second, despite the importance of visual materials, readers should not conclude that community development work requires prepared visuals. Many of the activities described can be conducted without the materials included in this kit. For example, maps can be drawn on the ground, and voting can be done by putting stones in squares scratched in the dirt. Issues surrounding gender analysis can be discussed effectively in a group without any visual aids at all. It is up to practitioners to change, simplify, and adapt the materials to their own needs.

At the same time, we have found that visual materials are extremely effective in breaking class, gender, education, literacy, professional training, and status barriers. This is true at both the community and agency levels. At the community level they empower

those who are not used to speaking up-such as women and the poor-to express themselves and their ideas through drawing, role plays, songs, stories, puppetry and through manipulating materials that are simple to use.

At the agency level, the materials have been very useful in encouraging senior staff to get out of their usual modes of thinking and planning. By interacting with people at different levels, they come to realize experientially that not everyone's reality is the same, and that a multiplicity of experiences enriches development. In this regard, I will never forget the expression on the face of a medical doctor at the United Nations Development Programme (UNDP), an outspoken supporter of primary health care for fifty years, when he played the three-pile sorting activity focusing on hygiene practices. In a room full of Ph.Ds, he realized that there was no agreement about which intervention was the most important to maintain health!

Third, a more fundamental concern has been that social science researchers will use these activities and materials primarily to

extract information for their own planning and research purposes, rather than for working with people as part of a long-term community empowerment process. A great challenge in genuinely adopting participatory approaches is giving up control to participants, facilitating their growth, and assisting local people to solve their own problems. If the materials are used in extractive ways or to preach particular messages, the application is no longer participatory and to call it participatory is less than honest.

The majority of the techniques in this kit were originated by Lyra Srinivasan, who was the training director of the PROWWESS Program until her retirement in 1990 and is the creator of the SARAR methodology. The materials themselves were developed in the field and used in rural settings, urban communities, and within agencies.

I hope you will find this kit useful. We look forward to learning from your experiences, and hearing about any new materials you have developed.

I wish you inventiveness!

Deepa Narayan
PROWWESS Coordinator
UNDP-World Bank Water and Sanitation
Program

## **ACKNOWLEDGMENTS**

Thanks are due first of all to the Department of Multilateral Development Cooperation of Norway's Royal Ministry of Foreign Affairs, which has consistently provided funding for PROWWESS activities, including this tool kit.

We wish to acknowledge six persons who have played important leadership roles in promoting participatory training. They are John Blaxall, Manager of the UNDP-World Bank Water and Sanitation Program; Siri Melchior-Tellier and Sarah Timpson, previous PROWWESS Managers; and Ron Sawyer, Aminata Traore, and Jacob Pfohl, all PROWWESS and Water and Sanitation Program staff.

Others who have become involved more recently and have supported the participatory training endeavor are Gunnar Schultzberg, Bob Boydell, Richard Pollard, Jennifer Sara, K. Minnatullah, Roshaneh Zafar, Sunita Chakravarty, and Rose Lionde, all of whom are staff members of the UNDP-World Bank Water and Sanitation Program.

Over the past decade, artists from many countries participated in creating and producing the prototypes of the materials included in this kit. The names of many of these artists and others who have been involved in organizing participatory workshops are listed beginning on page 61.

We would also like to thank Ted Howard, writer and editor, whose support and encouragement resulted in the completion of a product for which there never seemed to be sufficient time. Others who have helped in the production process are David Kinley, Wendy Wakeman, John Green, Mary Mahy, and Greg Langham.

The Tool Kit was produced in India by Whisper Design of New Delhi. Sunita Chakravarty of the Regional Water and Sanitation Group in New Delhi coordinated the project.

The art work reproduced on the Tool Kit box and cover of this guidebook is from the Warli tribe, who live in the Sahyadri mountains in Maharashtra state north of Bombay. These tribal peoples are renowned for their mythic vision of Mother Earth, their traditional agricultural methods, and their lack of caste differentiation.

Finally, we wish to acknowledge Pierre Landell-Mills, Senior Adviser, Environmentally Sustainable Development, for his support and encouragement.

## INTRODUCTION

This Participatory Development Tool Kit has been designed to serve a very clear and pressing need expressed by project managers, trainers, social scientists, engineers, extension workers, and other development practitioners who wish to use or support participatory processes and methods in their programs. While the activities and materials were developed with the water and sanitation sector in mind, they are adaptable to many other fields.

#### **Purpose**

The purpose of this tool kit is threefold:

- to stimulate development practitioners at all levels to consider and promote participatory approaches, by letting them see and touch materials which actually work in the field;
- to provide trainers with examples of participatory materials and their uses, so they can adapt them for their own purposes; and
- to offer ideas to local artists and field workers so they can create participatory materials that respond to both local needs and culture.

#### **Specific Objectives**

There are two types of activities and materials contained in this kit: first, those intended primarily for trainers and agency staff; and second, those designed particularly for community use, but relevant to trainers and agency

staff as well.

The kit is designed to help practitioners at all levels achieve the following results in their daily work:

- to engage people in sharing their own rich experience in a way that demonstrates to them the value and relevance of what they already know, and thus stimulates them to acquire new knowledge;
- to involve people in self-directed inquiry through which they can be responsible for compiling, tabulating, and interpreting data;
- to stimulate creative self-expression within the group so that old problems can be viewed from a new perspective, thus opening new possibilities for innovative solutions to common issues;
- to strengthen analytic and planning capabilities through tasks which require the use of comparative analysis, making choices and connections among alternatives, or planning a logical course of action; and
- to help people acquire and retain new information, the use of which can lead to better decision making and achieving desired goals.

#### **Underlying Principles and Philosophy**

If community members are to become more self-reliant and develop a genuine commitment to implementing, using, and managing improved water and sanitation systems, then clearly they cannot be treated as passive beneficiaries. People must be encouraged to participate and express their ideas and leadership. For their part, development personnel must be prepared to stimulate local problemsolving capacities and to involve the community deeply and actively in generating new ideas and taking initiative.

Experience gained in participatory development over the past fifteen years indicates that one of the constraints to institutionalizing this new approach has been a lack of materials to support the kind of interactive process that is at the heart of effective participation.

It cannot be emphasized too strongly that the materials in this kit *do not* stand alone. The kit itself is intended as a companion learning aid to three related publications focused on participatory methods in water supply and sanitation programs.

These three documents provide the principles and philosophy underlying the materials and exercises described in this kit. To effectively use these materials, it is essential to become familiar with the perspective contained in these publications:

- Tools for Community Participation: A
   Manual for Training Trainers in Participa tory Techniques. Provides project staff
   and trainers with a detailed account of
   the SARAR approach to participatory
   training. It includes detailed information
   for trainers about how to plan and con duct workshops. Step-by-step descrip tions of twenty-nine training activities are
   given.
- Participatory Evaluation: Tools for Manag-

ing Change in Water and Sanitation.

Provides policy makers, managers, and planning and evaluation staff with ideas about participatory processes and indicators that can be used to involve community members in program evaluation. The volume is structured around a set of key indicators that can be measured to determine progress toward the program objectives of sustainability, effective use, and replicability.

• Toward Participatory and Simple Research: Data Collection with People.
Focuses on the conceptual and practical aspects of simple and participatory research. It provides detailed guidelines on how to approach research as a pragmatic problem-solving process, and includes descriptions of participatory activities and information checklists.

For information about how to order these publications and how to contact participatory development trainers, see the section beginning on page 61.

#### Background to the Materials and Activities

Participatory materials have been developed during the past fifteen years in the field—in Bolivia, Brazil, Cape Verde, Costa Rica, Côte d'Ivoire, Ethiopia, Ghana, Guinea Bissau, India, Indonesia, Kenya, Lesotho, Mali, Mexico, Mongolia, Nepal, Nigeria, Pakistan, the Philippines, Senegal, South Africa, Tanzania, Thailand, Togo, the United States, Zambia, Zimbabwe, and elsewhere—and are currently being used in more than twenty countries.

Many of the materials and activities for the water supply and sanitation sector have been

developed through the PROWWESS Program (Promotion of the Role of Women in Water and Environmental Sanitation Services), a world-wide initiative of UNDP aimed at developing replicable approaches for involving communities—particularly women—in sustainable, effectively used, and environmentally sound drinking water supply and sanitation programs.

A majority of the materials are based on the SARAR methodology (Self-esteem, Associative strengths, Resourcefulness, Action planning, Responsibility). One element of the SARAR approach is to create and sustain a positive learning environment. Experience has shown that personal growth within a group setting, combined with the technical skills and content that are acquired in the course of problem-solving, helps to release the creative energy of individuals, thus enabling them to take a more active and effective partnership role in development.

#### Organization of the Kit

This kit is organized into twenty-five distinct activities. Each activity is briefly described in the following pages and is also cross-referenced to one or more of the PROWWESS and World Bank publications noted above that provide a fuller review of the technique and the principles upon which the exercise is based.

Each activity description contains the following information:

- Purpose
- Audience
- Time necessary to conduct the activity
- Materials needed
- Materials contained in this kit
- How to conduct the activity

Where to find more background on the activity

The materials related to each activity are contained in envelopes labeled with individual numbers and the name of the exercise.

#### **Adapting Materials to Local Contexts**

With the exception of those materials designed specifically for training trainers, the materials in this kit are *not* meant for direct use in the field.

This kit is designed as a prototype, containing examples of materials that will require local adaptation. In assembling this kit, we have deliberately chosen materials from different countries, of various sizes, colors, detail, and refinement. No one type of material is better than another. Variety of format and sophistication is not only acceptable, but desirable.

The best materials are those made on-site and based on interaction with the participants and the evolving needs of the group. In adapting the materials and exercises, a number of factors must be taken into account depending upon the objectives, geographic and cultural setting, the problems to be addressed, local availability of materials, and so forth.

For example, drawings of a village scene in Latin America, West Africa or South Asia are quite different in terms of houses, clothing, preferred colors, and tools. Household possessions and foods, and types of wells and toilets, differ widely from country to country. Key decision makers in water committees are often different in rural and urban contexts.

By developing a deeper understanding of how these sample materials are used and made, you can devise your own distinct materials based on the needs and realities of the people with whom you work.

A few words of advice. First, in using materials, we have found that it is easier for participants to interpret pictures, figures, and objects that have distinct outlines and a minimum of background or shading. Second, because most exercises can be more effectively conducted by organizing people into smaller groups, you will often need to create duplicate sets of materials.

In providing these twenty-five activities, we do not mean to suggest that they are the only ones that are important. Neither do we intend to imply that all or even most of the exercises will be relevant to any given situation or problem to be addressed. Each time a material is applied in practice, it gives rise to new insights and leads to fresh adaptations, or even to new products and exercises. Some materials stand alone; others are more effective when used sequentially.

#### The Goal: Increasing the Quality of Participation

To make it easier for facilitators to master the techniques of designing and using participatory activities, the exercises included in this kit are described in some detail in the following pages. However, it should not be inferred that there is only one proper way to conduct these activities. For example, pocket charts can be used by trainers to have workshop participants vote on which activity or session they considered to be most useful; at the community level, charts can be used to rate women's self-confidence or to determine which sources of water

are used for what purpose and by whom.

In carrying out these exercises, and in making adaptations or innovations, the main concern should be to increase the quality of participation and not to revert to a directive mode. We therefore encourage practitioners to begin by examining and thoroughly grasping the principles and philosophy upon which the methodology is based, then looking closely at the design and internal structure of the activity and the sample materials, and finally applying this understanding to conducting the exercise and adapting it to local circumstances.

For example, while all of these tools can be adapted for use in data gathering for external purposes, it would be counterproductive to the nature of participatory development to use them primarily for that purpose. To derive maximum benefit from this kit, each exercise should be viewed as a means to set in motion a process which, to be meaningful and effective, must be carried to completion by the participants themselves. Based upon a thorough understanding of the principles that underlie the individual activities, the practitioner should operate from a sound plan that selects specific exercises and sequences them in a way that stimulates learning and helps fulfill the objectives of the program. Again, we urge you to review and familiarize yourself with the three publications on participatory development cited above.

While there are no blueprints for success in conducting these exercises, experience suggests some guidelines that should be kept in mind:

 the activities should be used in open-ended and nondirective ways to maximize participation;

- the materials lend themselves to use in informal settings; when using them, create an environment in which people are relaxed and feel free to participate and express themselves;
- be particularly sensitive to the participation of women and whether they may experience greater freedom of expression during some exercises if men are not present;
- most activities are more effectively conducted in groups of no more than six or eight people; even smaller groups are often more desirable;
- be prepared when undertaking an activity, be clear about its purpose, what learning is desired, and how the activity will be conducted;
- resist any temptation to control the exercise; do not lecture, or correct participants who give the "wrong" answer or have inaccurate information; the job is to facilitate;
- as far as possible, allow the process to be controlled and directed by the participants themselves;

 the lack of available materials should not be a barrier to conducting an activity; many of those in this kit can simply be drawn on the ground if necessary.

#### Preserving and Maintaining the Materials

This kit will be useful to the extent that the materials it contains are kept in good order.

As you begin to work with the materials, you will notice that many have a large number of individual pieces. We have packaged them in a way that will assist you in keeping the materials for different methods separate from one another, and also help in protecting the materials from being lost or damaged. Each separate piece is coded on its back side to indicate to which activity and materials set it belongs. In the descriptions of the activities in the following pages, the numbers on the backs of individual pieces are often referred to.

Each time the materials are used, all pieces should be carefully replaced within their envelope for future use.

. •

## Participatory Activities

## CUP EXERCISE

**PURPOSE** 

To help participants clearly see the difference between directive and participatory approaches, as well as to recognize the degree of control or freedom implicit in the structure and content of a variety of tasks.

TIME

15 to 20 minutes

**AUDIENCE** 

Trainers, program staff, field workers.

MATERIALS NEEDED

Multiple copies of sets of cards. Each small group participating in the exercise should be given an identical set with which to work.

## MATERIALS CONTAINED IN KIT

Three sets of cards (seven cards in one set; five cards in each of the other two sets; seventeen total cards):

- 1. Seven cards depicting drinking cups and an action to take with each:
- Fill the cup to the brim with hot coffee.
- Fill the cup with hot coffee.
- Fill the cup with coffee.
- Fill the cup with some liquid.

- Put some liquid in the cup.
- Put something in the cup.
- · Do what you wish with the cup.
- 2. Five cards with statements or questions about actions related to a child's diarrhoea:
- Mix ½ teaspoon of salt and one teaspoon of sugar in a glassful of water to relieve your child's diarrhoea.
- Give your child water, salt and sugar mixture to relieve diarrhoea.
- Give your child some liquid to drink to relieve the diarrhoea.
- Do something to relieve your child's diarrhoea.

- What do you do to relieve your child's diarrhoea?
- 3. Five cards with statements and questions concerning problems in a village and their possible solutions:
- Your problem is that you drink contaminated water. You need a pump. I have a good pump for you.
- Your problem is that you drink contaminated water. You need a pump. Which type of pump do you like?
- Your problem is that you drink contaminated water. You need an improved water source. Which type do you prefer?
- Your problem is that you drink contaminated water. What would you like to do about it?
- What are the priority problems of your village? What solutions do you have in mind?

## How to Conduct the Exercise

- Start with the set of seven cards. Distribute a duplicate of the set to each small group. Be sure each set you distribute is well shuffled so that the cards are in random order.
- 2. Ask the participants to arrange the cards starting with the most directive on the left, and ending with the most open-ended on the right.
- Engage the participants in a discussion about the choices they made, and why they made them.
- 4. Distribute the second and third sets, in turn, and proceed with the same three steps as above. Alternatively, the exercise can be done with groups working on different sets of cards at the same time.
- 5. Ask the participants to discuss the relative merits of the more directive and the more open-ended approaches. Which of these approaches is most frequently used by extension workers and field agents in local projects? Which approach do participants feel will lead to the best solutions and results?

For More Background
"Cup Exercise," *Tools for Community*Particlpation, pp. 155-156

## JOHARI'S WINDOW

**PURPOSE** To facilitate communication between field workers and community members by creating greater awareness about degrees of interpersonal communication and the extent to which mutual understanding and trust have been established between two people.

**TIME** Under 30 minutes (1 hour if role-playing follows).

**AUDIENCE** Trainers, project staff, field workers.

## **MATERIALS** NEEDED

Four pictures, each depicting two women facing one another. Four labels: OPEN, BLIND, HIDDEN, UNKNOWN.

Optional material: two additional pictures of two women (see below).

## **MATERIALS CONTAINED IN KIT**

One chart showing two women in four different poses with the words: Open, Blind, Hidden, Unknown. This chart is from an adaptation of Johari's Window, described in Tools for Community Participation.

Four labels: OPEN, BLIND, HIDDEN, UNKNOWN.

Six pictures: each shows the same two women facing one another. The woman wearing a striped outfit represents an extension agent; the woman wearing green with red dots represents an average villager.

The pictures illustrate the following states of communication between the extension agent and the villager:

Picture 1: Open

Open communication and understanding

exists between the agent and villager.

Picture 2: Blind

The agent feels that the villager is ignorant. Therefore, she is instructing her in a directive way to try to get her to see things as the agent feels she should.

Picture 3: Hidden

A villager whose true feelings, beliefs and values are hidden from the agent because trust has not been established between them.

Picture 4: Unknown

Neither the agent nor the villager really know one another, nor appreciate what each brings to the process of development. They must work together.

Pictures 5 and 6 represent ways to open the other windows, particularly windows 2 (Blind) and 3 (Hidden). They are intended to stimulate discussion of what could be done to open communication between the learner and the facilitator.

Picture 5: The agent has provided the villager with visual tools that help her express her own ideas.

Picture 6: The agent is actively listening to the villager to better understand the local situation, customs and beliefs.

#### For More Background

"Johari's Window," *Tools for Community Participation*, pp. 167-168

## HOW TO CONDUCT THE EXERCISE

- 1. Post pictures 1-4 on a wall, or arrange them on the ground. Refer to the chart included with this exercise for an example of how they should be placed. Post only the pictures, not the labels.
- 2. Place the four labels in random order to one side.
- 3. Give a brief explanation of what the labels mean; however, do not link the descriptions to the pictures. Do not specify which label goes with which picture.
- 4. After explaining the labels, invite a volunteer to place the each label under the appropriate picture that illustrates the concept. Check to see if all participants agree with the labeling. If there is disagreement, discuss the different views until consensus is reached.
- 5. Invite discussion of the relevance of this exercise to contacts between extension workers and communities.
- 6. Using the remaining two pictures (numbers 5 and 6), invite comments on how they could help to open the "Hidden" window and avoid the lecture style used in the "Blind" window.
- Time permitting, invite participants to roleplay the situations depicted in the six drawings.

## SARAR RESISTANCE TO CHANGE CONTINUUM

## **PURPOSE**

To sensitize participants to the fact that agency staff and community members may have many different, often understandable, reasons for not wishing to adopt change.

To demonstrate a simple way of categorizing the kinds of resistance commonly met in a community or agency.

To infer from this analysis which approaches would be most appropriate when working with people who are either receptive or resistant to change.

#### TIME

1 to 11/2 hours

## **AUDIENCE**

Trainers, agency staff, field workers.

## MATERIALS NEEDED

One large diagram of the change continuum, listing seven stages of resistance or openness to change. The most resistant attitude is on the extreme left (where the individual does not even recognize the existence of a problem); the most open attitude is on the far right. The stages are:

- 1. There's no problem.
- 2. There may be a problem, but it's not my responsibility.
- 3. Yes, there is a problem, but I have my doubts.
- 4. There is a problem, but I'm afraid of changing for fear of loss.
- 5. I see the problem, and I'm interested in learning more about it.
- 6. I'm ready to try some action.
- 7. I'm willing to demonstrate the solution to others and advocate change.

One handwritten poster conveying a message to which there is generally some resistance. At the community level this might be, "Filter river water before drinking." At the agency level the statement might be, "Village women should be the key project decision makers."

## MATERIALS CONTAINED IN KIT

Two examples of change continuum diagrams.

Two "thought balloons" representing the kinds of feelings or attitudes people may have toward a proposed change. Balloons can be placed on the continuum diagram.

- 1. "At night, when we are sick, a latrine is very convenient. I want to build one."
- 2. "A pump will never work, the children will destroy it."

In order to conduct this exercise, you will need to draw and cut out blank balloons (as noted below).

## HOW TO CONDUCT THE EXERCISE

- 1. Begin by asking the group to recall occasions when they have observed resistance to an outsider's messages because of local beliefs, values and attitudes. For example, "flowing water is clean water," or "women cannot do technical jobs, so let's limit women's involvement to hygiene education."
- Point out that often these beliefs are not openly expressed to an outsider. Until they can be aired and discussed in a respectful way, there will be no openness to the outsider's alternative viewpoint.

- 3. Ask the participants to react to the message on the poster as if they were average community members, as well as local leaders and those who have had some exposure to outside ideas (through military service, for example). Have one or two of the participants jot down these responses and then write them as thought balloons.
- 4. Next, explain the several stages of the continuum diagram. Ask participants to place the thought balloons they have developed at the appropriate stages of the continuum. Encourage discussion about why a particular thought belongs at a specific stage.
- 5. Engage the participants in discussing questions such as: "At which stage would people be most receptive to didactic teaching? Which kinds of strategies are most useful in the more resistant stages? What value would participatory methods have for people at different points of the continuum?"
- 6. The exercise can be conducted or repeated using a message to which agency staff may be resistant, for example, "Agency personnel performance should be evaluated by clients or community people."

#### For More Background

"SARAR Resistance to Change Continuum," *Tools for Community Participation*, pp. 161-165

# THREE SQUARES ASSESSMENT

## **PURPOSE**

To clarify the concept of directive versus nondirective educational strategies.

To analyze workshop experiences and activities in terms of the relative degree of trainer dominance and trainee autonomy.

TIME

15 to 20 minutes

**AUDIENCE** 

Trainers, project staff, field workers.

## MATERIALS NEEDED

Three sheets depicting squares with different degrees of shading:

- 1. The nearly all-black square indicates that the trainer is almost totally dominant.
- The square divided equally between white and black indicates equal participation between trainer and trainee.
- 3. The nearly all-white square shows relatively little trainer dominance.

## MATERIALS CONTAINED IN KIT

Three sheets depicting squares (as noted above).

An example of an application of this exercise: a form for evaluating workshop activities.

## HOW TO CONDUCT THE EXERCISE

- 1. Have the participants identify three or more activities in which they have recently participated. These could include any of the exercises in this tool kit.
- 2. Show the participants the three squares, explaining that the shaded area represents the trainer's or facilitator's role and the light area stands for the participant's role.
- Ask the participants which of the squares best represents how they acted, and how the facilitator acted, during the activities they selected for discussion.
- 4. Let the participants discuss the implications among themselves. Avoid giving the "right" answer to the participants; this must emerge through discussion with the group, probing the justifications they offer for their positions.
- 5. When the group reaches consensus about each exercise, rate the activity as indicated on the sample evaluation form.

For More Background

"Three Squares Assessment," Tools for Community Participation, pp. 157-158

## PHOTO PARADE

## **PURPOSE**

To ascertain participants' perceptions of what is a "good" style of training when working with rural or urban poor communities.

To help participants learn to distinguish between didactic and learner-centered communication styles, and to identify the basic requirements for effective adult learning.

## TIME

1 hour

## **AUDIENCE**

Trainers, project staff, field workers.

## MATERIALS NEEDED

Nine photographs representing a wide range of communication situations, ranging from highly directive to highly participatory. Each small group should have a set. For example:

A lecture to a large audience

A small group discussion

A hands-on group activity

A setting where learners are passive

A setting where learners are active

A situation in which the extension worker is listening and village women are speaking in a lively fashion

## MATERIALS CONTAINED IN KIT

Twelve sample photographs

## HOW TO CONDUCT THE EXERCISE

- 1. Divide the participants into small groups and give each group an identical set of photographs.
- 2. Ask each group to select the three pictures they like the best, the three they like the least, and the three which fall in between. Explain that their choices should be based on the quality of the learning or communication that seems to be taking place in each photograph.
- 3. Do not explain the contents of the photographs; each group should be free to interpret the pictures as they see fit.
- 4. After allowing for fifteen minutes of discussion time within the groups, ask each to post the nine photographs they have chosen on the wall, placing the three negative photos side by side on the left, the three positive ones on the right, and the remainder in the middle. Then ask the second and third groups to place their photos directly below, in the same order.
- 5. Ask each group to then report on its reasons for categorizing their choices as positive or negative.
- 6. Have the groups discuss the similarities and differences in the photographs they have selected.

For More Background

"Photo Parade," *Tools for Community Participation*, pp. 152-154

## FORCE-FIELD ANALYSIS

## **PURPOSE**

To help participants understand the theory behind the planning techniques they will use in their own planning and in adapted form at the village level.

TIME

11/2 hours

**AUDIENCE** 

Trainers, project staff, field workers.

## MATERIALS NEEDED

Copies of a diagram of a basic Force-Field framework (see diagram marked #1 in this exercise) on which participants can draw present and future situations.

## MATERIALS CONTAINED IN KIT

facilitator's use and is not distributed as part of the activity.

Three examples of a Force-Field diagram:

- 1. The basic Force-Field framework
- 2. A current village situation that needs improvement
- 3. An example of how one group depicted a changed village situation in doing this exercise. This diagram is for the

## HOW TO CONDUCT THE EXERCISE

- 1. Divide the participants into small groups.
- 2. Draw a Force-Field chart on a large piece of paper, keeping the "now" and "future" boxes empty. Explain the framework of the Force-Field diagram as follows:
  - the left-hand box indicates a current situation:
  - the right-hand box indicates the same situation that has been improved at some time in the future;
  - the central arrow (the "critical path") emphasizes that the direction of movement is from the "now" to the "future";
  - the arrows pointing diagonally downward represent constraints or forces that are in the way of achieving desired goals;
  - the arrows pointing upward represent resources that can aid in moving forward.
- 3. Tell the groups that they will be given a Force-Field diagram showing a community situation that needs improvement. Their first task is to define in detail what is wrong with this situation, next to spell out the desired future situation or goal, and then proceed to identify the resources and constraints which apply to that particular situation.
- 4. Distribute the diagram; be sure to leave the box marked "Future" empty.
- 5. When the groups have completed their tasks, invite them to report in plenary and open up a discussion based on their

- analysis. Have the groups *draw* the future situation of the community in the "Future" box of the diagram.
- 6. Ask each group to then select any one constraint and identify the steps that could be taken to counteract or eliminate it with the help of one or more of the resources. Have the groups report back and discuss.
- 7. Continue the activity to work through as many constraints and resources as appropriate.

#### For More Background

"Force-Field Analysis," *Tools for Community Participation*, pp. 170-171

## UNSERIALIZED POSTERS

## **PURPOSE**

To encourage creativity and stimulate discussion of important family and community issues through the use of open-ended and flexible visual aids.

## TIME

45 minutes

## **AUDIENCE**

Primarily community members; also useful for trainers, project staff and field workers.

## MATERIALS NEEDED

A set of eight or more pictures of dramatic human situations. These scenes are open to varying interpretations and can be arranged in different sequences. The pictures should focus on human interaction, rather than activities such as harvesting crops or pumping water that can be easily described without having to think about what they might mean.

## MATERIALS CONTAINED IN KIT

Fourteen pictures showing various human situations and interactions.

## HOW TO CONDUCT THE EXERCISE

- 1. Divide the participants into small groups. Give each a full set of pictures.
- 2. Ask each group to choose any four pictures and weave them together into a story, giving names to the characters and to the community where the story takes place. Encourage them to develop a story with a plot that has a beginning, middle and end. Allow 15 to 20 minutes for this task.
- 3. Invite the groups in plenary to tell their stories, using the pictures they chose. Groups may choose similar pictures but compose very different stories from them; or they may choose different pictures but compose similar stories. The reasoning behind the differences and similarities in the stories should be thoroughly discussed by the group.
- 4. Allow time for the groups to tell as many stories as they want. Have one member of each group record the themes, issues and notable points raised in the stories.

For More Background

"Unserialised Posters," *Tools for Community Participation*, pp. 89-92.

## FLEXI-FLANS

## **PURPOSE**

To stimulate and increase the creative participation of community members through the use of open-ended materials.

## TIME

30 to 40 minutes

## **AUDIENCE**

Primarily community members; also useful for trainers, project staff and field workers.

## MATERIALS NEEDED

A variety of flexi-flans of people, animals, tools, and possessions, and a flannel board on which to arrange them.

Flexi-flans made of stiff paper or light cardboard are cutouts of human figures that have moveable arms, legs and torsos. However, they are not puppets and should not be manipulated as such. Rather, they are a form of "picture writing" and can be arranged on a flannel board to tell a story, identify a problem, analyze possible solutions, and so forth. Flexis should be used as a way of eliciting ideas and stimulating discussion, not as a tool to teach messages to community members.

Human figures should be broadly representative of the local community or society, and of different ages, both male and female. Figures should be both in full face and left and right profile so that they can be arranged to show people working, talking and engaged in conversation. The set should also include a number of props—houses, trees, animals, possessions, tools, utensils—associated with rural or urban life.

## MATERIALS CONTAINED IN KIT

Six sheets of drawings of flexis, including human figures, animals, tools, household possessions and utensils.

The flexi-flans should be cut out and assembled before undertaking the activity.

For More Background

"Flexi-flans as Creative Materials," Tools for Community Participation, pp. 83-84

Participatory Evaluation: Tools for Managing Change in Water and Sanitation, p. 84

## HOW TO CONDUCT THE EXERCISE

- 1. Begin by spreading out the flexi-flans on a table or flannel-covered board.
- Hold up the flexi-flans to show how they
  can be used to illustrate different actions.
   Show how they can be combined to
  express ideas, relationships and incidents.
- 3. Propose a simple task such as suggesting that the participants use the flexis to share something about their community or an event that they recall with pride or amusement. In setting up the task, make the instructions as brief and clear as possible.
- 4. Encourage the participants to use the materials to illustrate whatever they want to say. Impress upon the group that their creativity is what matters.
- 5. Have the participants share their experience with the larger group.

## MAP MAKING

**PURPOSE** 

To gather information about a community and its problems by having participants create their own map.

TIME

30 minutes to 2 hours

**AUDIENCE** 

Primarily community members; also useful for agency trainers, project staff and field workers.

MATERIALS NEEDED

Newsprint or large paper, markers, scrap materials as needed (pebbles, shells, twigs, chalk, seeds, buttons, clay, etc.).

## MATERIALS CONTAINED IN KIT

One sample map as an example of what community members have produced through this activity.

## HOW TO CONDUCT THE EXERCISE

There are many variants of mapping. Maps can focus on specific social issues, women's networks, spatial distribution of the well-to-do and their access to public infrastructure, and so forth. If paper is unavailable, maps can be drawn on the ground with a stick or other material.

- 1. Provide participants with materials.
- 2. Ask the group to use the materials to make a map and representation of their community.
- 3. Ask some members of the group to take the other participants on a tour of their map including the topography, demographics, aspects of the lives of the people, those things that people are proud of, and those they see as problems.
- 4. Based on the map and how people have described their community, initiate discussion of specific issues, such as water supply, sanitation, and particular concerns of women.
- 5. Let people create their maps with minimal interference and suggestions from facilitators and outsiders.

#### For More Background

"Map Building," *Tools for Community Participation*, pp. 99-100

Participatory Evaluation: Tools for Managing Change in Water and Sanitation, pp. 40,49

Toward Participatory and Simple Research: Data Collection with People

## POCKET CHART—WATER USE

## **PURPOSE**

To help community members learn a new way to assess and analyze their situation with regard to water supply and sanitation services.

TIME

1 hour

**AUDIENCE** 

Primarily community members; also useful for trainers, project staff and field workers.

## MATERIALS NEEDED

A pocket chart consists of rows of paper or cloth pockets, usually four to six horizontally and six to ten vertically. A set of pictures is attached above the top row of pockets. These pictures represent areas in which data are needed, such as different sources of domestic water supply. Each of these pictures is placed at the head of a vertical column. If desired, pictures can also be attached down the left-hand side to indicate other variables, such as how the different water sources are put to use by community members. However, in order to avoid confusion, the facilitators should use only one variable on a column at a time.

Materials required to carry out this exercise include:

- three to ten picture cards;
- a pocket chart (either as described above; using cans or pots set on the ground beneath the pictures; or drawing a matrix on the ground);
- paper slips, leaves or seeds for voting.

## MATERIALS CONTAINED IN KIT

One sample chart showing several water sources and one use (cooking).

Two sets of cards (one set of nine cards, the other of sixteen) depicting different water sources and uses.

## HOW TO CONDUCT THE EXERCISE

1. Create your pocket chart as follows:

Across the top of the chart, place three of the cards depicting water sources (a river, a well, a pump, and so forth). Down the left-hand side of the chart, place three or more cards showing different water uses (cooking, washing, drinking, and so forth). The number of cards used is based on the detail and level of complexity desired. Place small cloth or paper pockets or other containers along each of the rows you have created.

- 2. Place the pocket chart in a location that is accessible, but also where voting can be done confidentially.
- 3. Explain to the group that the pocket chart can be used to determine how different sources of water are used by the community.
- 4. Illustrate how the balloting is performed by placing a slip of paper into a pocket or container to indicate a choice or preference. Remove the slip after the demonstration.
- 5. Ask for six volunteers to perform the voting. Give them enough ballots so that they can vote on how they use each source of water. Have the participants vote one at a time. If the entire group wants to vote, organize the voting accordingly.

- 6. When the voting is complete, ask another group of volunteers to remove the voting forms and tabulate the results.
- 7. Discuss the patterns of use that emerge and record the findings. Engage the group in a discussion about the meaning of these findings. For example, "Why do so many (or so few) people prefer one source of water for washing over another? Is this sample representative of most people in the village? Do preferences have any effect on health and well-being? Are there seasonal differences?"
- 8. Once the activity is understood, it should be taken over by the community and used to assess and analyze information about other issues they face.

#### For More Background

"Pocket Chart," *Tools for Community Participation*, pp. 93-95

Participatory Evaluation: Tools for Managing Change in Water and Sanitation, p. 47

Toward Participatory and Simple Research: Data Collection with People

# GENDER ANALYSIS—ACCESS TO RESOURCES

#### **PURPOSE**

To collect information, raise awareness, and understand how access to and control of household and community resources varies according to gender.

## TIME

1 hour

## **AUDIENCE**

Primarily community members (men and women); also useful for trainers, project staff and field workers.

## MATERIALS NEEDED

Three large drawings of a man, a woman and a couple.

At least 15 cards depicting different resources and possessions owned by local community members.

## MATERIALS CONTAINED IN KIT

Three large drawings of a man, a woman and a couple.

Twenty cards depicting different resources and possessions such as:

- cattle
- chickens
- bicycle

- currency
- trees
- -vegetables

- furniture
- huts
- plants

- radio
- pipe
- jewelry

- fruit
- -donkeys
- -horse/cart

- bags of
- bedroom
- water pots

- maize
- furniture

## HOW TO CONDUCT THE EXERCISE

- 1. Place the three large drawings on the ground, in a row. Underneath these drawings, scatter the smaller cards at random. Include some blank cards.
- 2. Ask the participants to sort the cards by categorizing them under the three large drawings in columns, depending on who owns or controls the resource.
- 3. Facilitate discussion among the participants about why they made the choices they did. Be particularly sensitive to including women in the discussion, or organize the exercise into two separate activities, one for men and one for women, and then let them share the results of their activities.

#### For More Background

Participatory Evaluation: Tools for Managing Change in Water and Sanitation, pp. 106-109

## TASK ANALYSIS BY GENDER

#### **PURPOSE**

To collect information, raise awareness and understand how household and community tasks are distributed according to gender.

To understand how much role flexibility by gender is associated with the different tasks.

#### TIME

1 hour

### **AUDIENCE**

Primarily community members (men and women); also useful for trainers, project staff and field workers.

## MATERIALS NEEDED

Three large drawings of a man, a woman and a couple.

At least a dozen cards depicting daily household and community tasks. The pictures can be of either male or female figures, regardless of whether it is a man or a woman who usually performs the task in question. Blank cards should also be provided so that participants can draw tasks not already included in the set.

## MATERIALS CONTAINED IN KIT

Three large drawings of a man, a woman and a couple.

Fourteen small cards showing women performing daily activities:

- plowing a field
- constructing a building
- hoeing a garden
- basket weaving
- building a latrine
- looking after a child
- carrying water
- growing crops
- cutting grass
- visiting a health center
- well construction
- riding a bicycle
- teaching
- resting

## HOW TO CONDUCT THE EXERCISE

Note: It is useful to conduct the resource analysis and task analysis activities sequentially; taken together, they make it dramatically clear that while men control most of the resources, women do many of the burdensome tasks.

- 1. Place the three large drawings on the ground, in a row. Below these drawings, scatter the smaller cards.
- 2. Ask the participants to sort the cards by categorizing them under the three large drawings in columns, according to whether the task is generally performed by a man, a woman or both.
- 3. Let the participants take over the exercise and conduct the discussion.
- 4. When some degree of consensus is reached, initiate a discussion about why the participants made the choices they did. Be particularly sensitive to including women in the discussion.
- 5. Ask the group to analyze the workloads, both the relative amount of work involved in each task and the division of labor between men and women. Ask which are the most burdensome tasks. Discuss how much flexibility there is in changing the workload by task of men and women. Link the tasks and workloads to project activities; focus discussion on the constraints and opportunities for participation by women.

#### For More Background

Participatory Evaluation: Tools for Managing Change in Water and Sanitation, p. 108

## WOMEN'S LIVES— NEEDS ASSESSMENT

#### **PURPOSE**

To collect information, raise awareness, and understand the priority needs of women based on their different tasks, concerns and responsibilities.

#### TIME

1 hour

### **AUDIENCE**

Primarily community members (women and men); also useful for trainers, project staff and field workers.

## **MATERIALS NEEDED**

At least ten cards that depict women performing various daily tasks. Blank cards should also be provided for drawing additional tasks.

## **MATERIALS CONTAÍNED IN KIT**

Thirteen individual cards showing women performing activities:

- feeding a child
- leading a meeting
- relaxing
- working in a field
- harvesting
- carrying water
- bathing
- cooking
- sewing

- hoeing
- visiting a health
- carrying firewood sweeping
- center

## HOW TO CONDUCT THE EXERCISE

- 1. Place the cards on the ground in full view of the participants.
- 2. Explain that the cards show women performing different tasks.
- 3. Ask the participants to discuss the tasks, and then categorize them into three groups: most difficult to perform; easiest; most time-consuming. If consensus is not achieved, note the minority opinions.
- 4. Allow the participants to take over the discussion as much as possible. For example, the picture of a woman and her child at the health clinic can lead to a discussion of the distance from the village to the clinic, the problems encountered when transporting pregnant women in a safe and timely manner to the clinic, and so forth.
- 5. Ask participants to consider which problems they can solve using the resources available in the community.

Note: The same activity can be repeated focusing on men's needs by redrawing cards with male figures and activities. Cards can also be drawn to show some activities being carried out by men and some by women.

For More Background

## **WOMEN'S TIME** MANAGEMENT

#### *PURPOSE*

To determine the tasks women perform, the sequence in which they do them, how long each activity takes, and whether the most time-consuming activities are considered to be a problem.

#### TIME

1 to 2 hours

#### **AUDIENCE**

Primarily community members (either all women or mixed groups); also useful for trainers, project staff and field workers.

## MATERIALS **NEEDED**

Cards that depict different tasks which women perform during their daily routines.

## **MATERIALS CONTAINED IN KIT**

Nine individual cards showing women performing daily tasks such as:

- cooking
- sweeping
- carrying water

- harvesting washing
- caring for child
- clothes
- making dung
  - patties

## HOW TO CONDUCT THE EXERCISE

- 1. Lay the nine cards on the ground.
- 2. Ask each member of the group to sequence the cards by the order in which they normally perform the activities. Provide blank cards for drawing any extra chores the women may describe. Record the similarities and differences between the responses of the participants.
- 3. Next, provide the group with match-sticks. A full match-stick represents an hour; a half match-stick represents one-half hour. Ask the group to determine how long each chore takes by placing match-sticks on the respective cards.
- 4. Discuss the findings with the group and let them summarize what was learned.
- 5. Discuss the most time-consuming chores and whether they are considered to be problematic. Ask the group which problems they would first like to consider and solve. Ask how they would change their daily routine if they had water closer to their home.

Note: the exercise can be conducted with groups of men who are asked to assess women's time constraints. As an alternative, the pictures can be redrawn to represent a man's daily routine.

#### For More Background

Participatory Evaluation: Tools for Managing Change in Water and Sanitation, p. 76

## CRITICAL INCIDENT ANALYSIS

**PURPOSE** 

To help community members further develop their analytical abilities in order to address local problems.

TIME

20 to 30 minutes

**AUDIENCE** 

Primarily community members; also useful for trainers, project staff and field workers.

## MATERIALS NEEDED

Four to eight pictures of people in problem situations.

This exercise involves analysis of the pros and cons of proposed solutions to specific problems. Pictures are useful in illustrating the process leading up to a crisis. For example, a critical incident in the life of a rural household that has no latrine could be developed with three pictures: (a) an angry husband refusing to build a latrine; (b) the wife going out to the bush on a rainy night due to lack of household sanitary facilities; (c) the wife ill with a fever, the house neglected and the husband looking very worried.

## MATERIALS CONTAINED IN KIT

Two sets of drawings (one set with three color pictures; one set with two black and white pictures) of people in problem situations.

## HOW TO CONDUCT THE EXERCISE

- 1. Pass the drawings around the group.
- 2. Ask the group to analyze the pictures in terms of problems they may depict. Have the group discuss the factors that may have contributed to the problems and how they could be resolved.
- 3. Discuss the pros and cons of different proposed solutions.

For More Background

"Critical Incident," *Tools for Community Participation*, pp. 110-111

# THREE-PILE SORTING CARDS —HYGIENE PRACTICES

#### **PURPOSE**

To develop analytical and problem-solving skills and the ability to evaluate causes and effects.

#### TIME

30 to 45 minutes

### **AUDIENCE**

Primarily community members; also useful for trainers, agency staff and field workers.

## MATERIALS NEEDED

A set of nine to fifteen cards, each with a picture or scene which could be interpreted as good, bad, or in-between as it pertains to health, water, supply, equity, training, and so forth.

## MATERIALS CONTAINED IN KIT

A set of ten cards. The cards depict hygiene practices involving water, sanitation and health. Some practices shown are good, others bad. Still others show some good and some bad features.

The cards illustrate situations and practices such as:

- waste surrounding a hut
- defecating in the bush
- bathing
- carrying water from a stream
- drinking water drawn from a pump
- drinking water from a tap
- a pool for capturing run-off from a pump

## HOW TO CONDUCT THE EXERCISE

The Three-Pile Sorting exercise is an investigative and awareness-raising exercise in which participants are asked to sort sets of picture cards into three piles.

- Form a circle and invite several volunteers to come forward, or conduct the activity in several small groups using multiple sets of cards.
- Qive the participants the cards to study; ask them to sort the cards into three piles: good, bad or in-between hygiene practices.
- 3. Encourage participants to reconsider their choices in consultation with other members of the group. Raise questions which would help the group to see the cards in alternative ways, and, if necessary, to change their classifications.
- 4. Initiate discussion on what the common practices are within the community.
- 5. If appropriate, have participants select one or more cards from the "bad" category and identify actions to resolve the problem. Such actions might include installing or repairing pumps, maintaining the cleanliness of the community environment, or ensuring that women have a say in decisions. Then, have the group decide who should be responsible for taking each action: the community, the government, or both jointly.

#### For More Background

"Three-Pile Sorting Cards," *Tools for Community Participation*, pp. 101-103

## CONTAMINATION ROUTES

#### **PURPOSE**

To help participants analyze how disease can be spread through common personal practices involving water, sanitation and other aspects of the environment, and what preventive actions can be taken.

#### TIME

30 minutes to 1 hour

#### **AUDIENCE**

Primarily community members; also useful for trainers, project staff and field workers.

## MATERIALS NEEDED

At least ten cards showing different ways in which diseases are spread and can be prevented.

## MATERIALS CONTAINED IN KIT

Two sets of cards (one set containing six large cards; the other set containing fifteen small cards) depict contamination routes and preventive measures. For example:

- washing hands with tap water
- insects hovering around an open pot of food
- defecating in the bush
- a covered pot of food

- a clean and functioning latrine
- human feces
- crowded sleeping conditions
- children playing in river water
- a sick girl
- men picking at their scabs
- a mosquito
- bathing
- carrying water from a river
- pools of stagnant water near a home

## HOW TO CONDUCT THE EXERCISE

- 1. Divide the participants into three groups.
- 2. Provide each group with a set of cards randomly ordered. Ask the participants to choose cards that suggest diseases commonly found in the community.
- 3. Have each group discuss the causes of each disease, and which cards illustrate preventive measures (for example, a covered pot to prevent flies from contaminating food). Have the participants identify and draw other preventive measures (such as pills to combat malaria from mosquitos) for which cards may not already exist.
- 4. Have participants select one or more disease cards and identify who should be responsible for taking each action: the community, the government, or both jointly.
- 5. Ask the participants to discuss why they made the connections they did between diseases and their causes and prevention. Avoid criticizing faulty connections, but suggest that the matter be discussed further.

For More Background

Tools for Community Participation, p.41

## STORY WITH A GAP

#### **PURPOSE**

To engage community members as a group in planning water, sanitation and health activities.

To demonstrate how visual materials can simplify the planning process.

TIME

45 minutes to 1 hour

**AUDIENCE** 

Primarily community members; also useful for trainers, project staff and field workers.

MATERIALS NEEDED

One set of "before" and "after" pictures.

## MATERIALS CONTAINED IN KIT

Four samples of sets of before and after scenes of community life. The before picture illustrates a problem situation; the after scene depicts a greatly improved situation or solution to the problem.

Pictures 1 A&B:

**Before**: A community with an open sewer, children defecating outdoors, water being

dumped in the water supply, huts with no doors.

After: The same community with a water pump and water storage, a garden, meeting area, huts with doors and homes with windows.

Pictures 2 A&B:

**Before**: A mother preventing her child from using an improved latrine.

**After:** The same mother helping her child into the improved latrine.

#### Pictures 3 A&B:

**Before**: A long line of women at a broken pump.

After: The pump repaired.

#### Pictures 4 A&B:

**Before**: A community in great disrepair (closed school, animals in the road, women forced to carry water, defecating in public, children playing in an unpaved road).

**After:** A revitalized community with paved road, food stores, an open school, electricity, a community soccer field.

#### For More Background

"Story with a Gap," Tools for Community Participation, pp. 118-119

Participatory Evaluation: Tools for Managing Change in Water and Sanitation, pp. 71, 108

Toward Participatory and Simple Research: Data Collection with People

## HOW TO CONDUCT THE EXERCISE

- 1. Divide the participants into several small groups.
- 2. Present each group with the same set of before and after pictures. Ask each group to first consider the before picture, and discuss why the situation has deteriorated to this point. For example, in the before scene of a broken well pump, participants might suggest that there are other water sources, no pump caretakers, that community members lack knowledge for proper maintenance, that the pump has been vandalized, or that nobody owns the pump.
- 3. Next, ask each group to discuss the after scene of the improved situation. Ask the group what steps they think the community might have taken to change the conditions of the village, what obstacles they encountered, and what resources they needed.

## PUMP REPAIR ISSUES

#### **PURPOSE**

To stimulate understanding among community members of the roles and responsibilities involved in maintaining water and sanitation facilities.

To initiate discussion about effective strategies for dealing with pump breakdowns.

#### TIME

45 minutes to 1 hour

#### **AUDIENCE**

Primarily community members; also useful for trainers, project staff and field workers.

## MATERIALS NEEDED

The materials needed for this exercise are those contained in this kit, adapted to the local cultural context.

## MATERIALS CONTAINED IN KIT

Three large drawings:

- a water vendor and his broken-down cart
- a village scene showing a broken pump
- the same village scene with the pump repaired and functioning

Ten small cards, each depicting one factor that is important in pump maintenance and repair. For example:

- purchasing tools
- sweeping the pump area
- paying the pump attendant
- people contributing money
- people speaking with an official
- using a tool to repair the pump

## HOW TO CONDUCT THE EXERCISE

- Begin by holding up the picture of the water vendor with his broken down cart.
   Ask the participants to suggest what the vendor needs to do in order to repair the cart.
- 2. Next, hold up the picture of the village scene with the broken pump. Ask the participants what the community must do in order to repair the pump. Have the group contrast and compare the actions that community members must take to repair the pump with the actions the water vendor needs to take to repair his cart. Engage the participants in a discussion by asking questions such as, "Who is responsible for making the repairs in each case? Who must pay for the repairs? Which is more difficult to maintain in good working order—a pump or a cart? Why?"
- 3. Next, hold up the large drawing of the village with the pump repaired. Inform the participants that this drawing shows the same village one month later. Ask them to discuss the factors that could have produced the change between the two pictures. Pass around the 10 small cards to help stimulate discussion. Which steps were most important? Who was responsible for each? What action did the villagers take first? What was the order of the other actions?
- 4. Be sure to let the participants know that they are free to identify actions not depicted on the cards. Distribute some

- blank cards so that people can draw their own key actions.
- 5. Ask the participants to discuss how the pump can best be maintained once it has been repaired. Who will keep it clean? Who is responsible for storing the tools? How should the pump's functioning be monitored?

#### For More Background

"Pump Repair Issues," Tools for Community Participation, pp. 123-124

# WHAT IS POVERTY? WHO IS POOR?

#### **PURPOSE**

To determine what poverty means in a particular community, and to enable the community to decide which of its members should be targeted to receive the most assistance.

TIME

1 hour

**AUDIENCE** 

Primarily community members; also useful for trainers, project staff and field workers.

MATERIALS NEEDED The materials needed for this exercise are those contained in this kit, adapted to the local cultural context.

## MATERIALS CONTAINED IN KIT

Three drawings of a man, a woman, and a couple.

Three labels: rich, average, and poor.

Fifteen cards depicting different possessions:

- furniture
- animals
- radio

- garden
- trees
- bicycle

- -chickens
- crops
- maize

- cart
- fruit tree
- money

- goat
- -vegetables
- construction materials

## HOW TO CONDUCT THE EXERCISE

This activity can be made simple or complex depending on the purpose. For example, the activity can be stopped at step four.

- Begin by placing the three labels-rich, average and poor-on the ground side by side. Then, place and spread out the fifteen cards randomly below the labels so that they can be viewed by all of the participants.
- 2. Ask the participants to discuss and categorize the cards by placing them in vertical columns, depending on whether the possessions are likely to be owned by rich, average or poor people in the community. Ask the participants to draw or write on blank cards any possessions not depicted on the cards. Participants may also want to include characteristics or attributes associated with different levels of wealth (such as powerlessness, happiness, sense of belonging, and number of children).
- After a consensus has been reached on who is likely to own which possessions, ask participants to identify three cards that most characterize each group.
- 4. Remove the labels and again mix up the cards. Now use the drawings of a man and a woman to indicate whether a household is headed by a man or woman. Ask participants to categorize the cards again on the basis of whether there are

differences in wealth and well-being between male and female-headed households.

5. Finally, ask the participants to categorize the actual families in the community in terms of whether they are rich, average or poor. Names of families can be written on slips of paper. Allow for ample discussion until consensus is reached. Ask whether this activity should be done with confidentiality.

#### For More Background

Participatory Evaluation: Tools for Managing Change in Water and Sanitation, p. 64

## WATER GROUP FUNCTIONING— THREE STAR GAME

#### **PURPOSE**

To enable water users' groups to rate their overall performance, and to evaluate the contribution of key people and activities to the functioning of the group.

#### TIME

1 to 2 hours

#### **AUDIENCE**

Primarily community members; also useful for trainers, project staff and field workers.

## MATERIALS NEEDED

The materials needed for this exercise are those contained in this kit, adapted to the local cultural context.

## MATERIALS CONTAINED IN KIT

Three stars-big, medium, and small.

Seven cards depicting water group functions and key people associated with water groups:

- -group cooperation
- village leader

-sanctions

- fee collection
- angry group members
- nlauning and
- extension worker
- planning and design

## HOW TO CONDUCT THE EXERCISE

- 1. Place each of the three stars on the ground in descending order of size. Explain to the group that, depending on the context, the stars represent excellent, average, poor; or very important, important, not important.
- 2. Then, display the seven cards and explain the pictures. Ask the participants to discuss the effectiveness of each person or activity in their own group.
- 3. Ask the group to place each of the pictures underneath the appropriate size star to rate its functioning.
- 4. Once consensus is reached, ask the group to explain and discuss its ratings.
- 5. Ask the group to give itself an overall rating.
- 6. Encourage the discussion to focus on follow-up planning to take corrective action where needed.

#### For More Background

Participatory Evaluation: Tools for Managing Change in Water and Sanitation, p. 54

# UNDERSTANDING THE DECISION-MAKING PROCESS

**PURPOSE** 

To encourage and stimulate people to understand and evaluate the decision-making process and their participation in it.

TIME

1 to 11/2 hours

**AUDIENCE** 

Primarily community members; also useful for trainers, project staff and field workers.

MATERIALS NEEDED The materials needed for this exercise are those contained in this kit, adapted to the local cultural context. The number of large and small cards will vary depending on the local situation, and the decision-making process to be analyzed.

## MATERIALS CONTAINED IN KIT

Five large cards (an outside official, village official, a village or water committee, a community woman, and a community man).

Twelve smaller cards depicting key decision points or factors within a water supply project, such as:

- site selection
- construction
- planning
- design

- fee collection
- -maintenance
- -technology

## HOW TO CONDUCT THE EXERCISE

- Place the large cards on the ground, and explain that each represents a person or group that has an influence on how project decisions are made. The exercise can be simplified by reducing the number of decisionmakers.
- Pass out to the participants the smaller cards of project decision points, and ask them to suggest what each card represents. Misconceptions should be clarified before proceeding.
- 3. Ask the participants to discuss who determined the decision at each of these points or on each of these issues. Initiate a free-flowing discussion about the decisionmaking process touching on key issues such as, "Is there a system in place for decision making and who participates in it? Who makes the decision about undertaking repairs? Who determines the amount of monthly contributions? How were technology choices made? Who gets water first and who determines that? Who controls the valves that are used? Who is responsible for repairs, and are they paid for their services? How is conflict resolved?"
- 4. When consensus is reached, have the participants place the cards with the picture of the key decision maker. If there is no consensus, note the differences and proceed with the process.

5. If people are not satisfied with their role in decision making, this becomes clear and the discussion can then focus on what changes the community would like to see. Gender differences also become clear and can be discussed.

#### For More Background

Participatory Evaluation: Tools for Managing Change in Water and Sanitation, pp. 43-46, 57

## WOMEN'S CONFIDENCE

**PURPOSE** 

To measure the degree of women's participation and self-confidence, and changes that occur over time.

TIME

30 to 45 minutes

**AUDIENCE** 

Primarily community members; also useful for trainers, project staff and field workers.

MATERIALS NEEDED The materials needed for this exercise are those contained in this kit, adapted to the local cultural context.

Behavior displaying confidence is culturally specific. This should be kept in mind when developing locally appropriate pictures for this exercise.

## MATERIALS CONTAINED IN KIT

Three cards depicting a woman with varying degrees of confidence:

- a woman too timid to enter a group meeting;
- a woman joining a water group but too shy to participate;
- a woman bold enough to talk, challenge and ask questions.

## HOW TO CONDUCT THE EXERCISE

- 1. Prepare a simple pocket chart, placing one pocket underneath each of the three cards. Alternatively, pictures can be placed on the floor.
- Qive each participant a piece of paper, pebble or seed, and ask them to use it to vote on which image most reflects their own feelings.
- 3. To determine the change in self-confidence that may have occurred over time, two sets of the same pictures can be used to depict the level of confidence before the project intervention and after.
- 4. Encourage discussion about what changes men perceive in women, what changes women perceive in other women, what contributed to the changes, and what have been the consequences of the changes. Before and after photographs of the situation can be used to indicate changes over time.

Note: This activity can be done in groups that either segregate or combine men and women.

#### For More Background

Participatory Evaluation: Tools for Managing Change in Water and Sanitation, pp. 50-53

## OPEN-ENDED SNAKES AND LADDERS

**PURPOSE** 

To assist communities and health workers in analyzing the quality of local health information, and whether health education programs are effective.

TIME

1 hour

**AUDIENCE** 

Primarily community members; also useful for trainers, project staff and field workers.

MATERIALS NEEDED Large chart of snakes and ladders; dice; pebbles or other markers for game pieces; at least twenty culturally appropriate cards showing healthy and unhealthy hygiene practices. Each card must fit within the size of the squares on the snakes and ladders chart.

## MATERIALS CONTAINED IN KIT

Large chart of snakes and ladders.

Twenty-three cards depicting healthy and unhealthy hygiene practices. For example:

- boiling water
- swimming in river
- flies on food
- washing dishes in river
- fenced-in garden
- -dumping garbage using a well
- flies
- washing hands
- 11100
- visiting health clinic
- -sweeping
- using a latrine
- defecating
- community meeting
- outdoors

## HOW TO CONDUCT THE EXERCISE

Snakes and ladders can be played either by teams or individually. Players who land on snakes go to the bottom of the snakes; players who land on ladders rise to the top of the ladders. The object of the game is to reach the top of the chart first. The game generates great excitement and learning as teams coach their dice roller on which cards to pick.

- Place the chart of snakes and ladders on a table or on the ground, visible and accessible to all participants.
- 2. Place all the cards outside the board; divide the participants into two groups.
- 3. Just as in the regular snakes and ladders game, this game is played with the roll of a dice.
- 4. When a team lands on the head of a snake, the team must select a card depicting an unhealthy practice to avoid going down the snake.
  - If a team lands at the bottom of a ladder, the team must select a healthy practice before it can climb the ladder.
- 5. The activity can be conducted with children and adults; rules can be varied and made more or less complex.

#### For More Background

Participatory Evaluation: Tools for Managing Change in Water and Sanitation, p. 85

## MONITORING FORMS

**PURPOSE** 

To decentralize the monitoring process by enabling community people to carry it out themselves.

TIME

1 hour

**AUDIENCE** 

Primarily community members; also useful for trainers, project staff and field workers.

MATERIALS NEEDED

Two sample monitoring forms to suggest possibilities for local monitoring

## MATERIALS CONTAINED IN KIT

Three sample monitoring forms used to monitor:

- progress on toilet construction
- toilet functioning
- primary water source being used by community families

## HOW TO CONDUCT THE EXERCISE

- 1. In a group discussion, ask community members how the monitoring process can be simplified so that they themselves can conduct the monitoring.
- Choose one topic of immediate relevance, for example latrine construction monitoring.
- 3. Ask people to identify what aspects are most important to monitor. You may later introduce the monitoring form to give people an example they can use in creating their own form.
- 4. Ask people to decide who should do the monitoring, how often, and how the information will be recorded and used.

#### For More Background

Participatory Evaluation: Tools for Managing Change in Water and Sanitation, p. 29

# ABOUT PROWWESS AND THE UNDP-WORLD BANK WATER AND SANITATION PROGRAM

People's participation in the development process is essential for human development and for achieving sustainability, particularly in the provision of basic services like water and sanitation.

PROWWESS (Promotion of the Role of Women in Water and Environmental Sanitation Services) is a worldwide initiative aimed at developing replicable approaches for involving communities—particularly women—in sustainable, effectively used, and environmentally sound drinking water supply and sanitation programs. Since 1983, the PROWWESS group has been creating and field testing new methods for participatory training, research and evaluation, and has been developing innovative grassroots training materials. It has benefitted from the generous support of the United Nations Development Programme (UNDP), and the governments of Norway, Canada, Finland, and the United States.

Originally located in UNDP's New York headquarters, the PROWWESS group today is part of the UNDP-World Bank Water and Sanitation Program located in the World Bank in Washington, D.C. The Program is a collaborative initiative involving UNDP, the World Bank, and ten bilateral donors that seeks to improve the access of poor people in developing countries to safe water and sanitation on a sustainable basis.

Together with governments, donor agencies, nongovernmental and private partners, the Program promotes innovative solutions tailored to meet local needs and conditions. Active in over forty developing countries on three continents, the Program follows a three-pronged strategy of building capacities at the national and local levels, supporting sustainable investments, and disseminating lessons and knowledge from the field.

• • A

## PARTICIPATORY MATERIALS AND TRAINERS

#### **Publications**

The *Participatory Development Tool Kit* is a companion to a series of three PROWWESS and World Bank publications. Referring to and being intimately familiar with these publications is essential for full understanding and effective use of the materials in this kit.

Upon request, a limited number of complementary copies of all three publications are available to southern NGOs.

Lyra Srinivasan. 1990. Tools for Community Participation: A Manual for Training Trainers in Participatory Techniques. PROWWESS/UNDP. New York.

To order:

PACT, Inc.

777 UN Plaza

New York, NY 10017

Telephone (212) 697-6222

Price: \$17.95

Manual & video: \$45.95

Deepa Narayan. 1993. Participatory Evaluation: Tools for Managing Change in Water and Sanitation. World Bank Technical Paper 207. Washington, D.C.

To order:

The World Bank Book Store

Customer Service 1818 H Street, NW

Washington, DC 20433 USA Telephone (202) 473-2941

Price:\$9.95

Deepa Narayan. Forthcoming, 1994. Toward Participatory and Simple Research: Data Collection with People. The World Bank. Washington, D.C.

To order:

The World Bank Book Store

Customer Service 1818 H Street NW

Washington, DC 20433 USA Telephone (202) 473-2941

#### **Participatory Trainers**

Trainers with experience in participatory development techniques are active around the world. Many have been associated with the PROWWESS program during the past decade. In the spirit of supporting local development, we are making available this list of trainers.

This list is not exhaustive. Where several people are available in the same agency, we have listed the name of the agency head or the person most directly involved in training. Some groups also have artists who can help to develop local materials. We have not included names of trainers who are not available to agencies other than their own.

If you would like information on participatory training, please contact one of the trainers in your area. You may also want to contact the Program's headquarters in Washington, DC, or a regional water and sanitation group (RWSG) in Nairobi, Abidjan, Jakarta, New Delhi, La Paz, or Guatemala City. These addresses are also listed below.

#### UNDP-World Bank Water and Sanitation Program Headquarters

John Blaxall
Program Manager
UNDP-World Water and Sanitation Program
The World Bank
1818 H Street, NW
Washington, DC 20433
Tel: (202) 473-6917

Fax: (202) 477-0164

#### Regional Water and Sanitation Groups

RWSQ-East and Southern Africa The World Bank P.O. Box 30577 Nairobi Kenya

Tel: (254-2) 228477

Fax: (254-2) 213925; 213926; 213927

RWSQ-West Africa
The World Bank
Corner Booker Washington/Jacques Aka Streets
01 B.P. 1850
Abidjan 01
Cote d'Ivoire
Tel: (225) 442227; 443514; 446498

Fax: (225) 441687

RWSG-East Asia and Pacific The World Bank P.O. Box 1324 Jakarta Indonesja

Tel: (62-21) 252 2313; 252 0606; 252 3210

Fax: (62-21) 252 0432

RWSG-South Asia The World Bank P.O. Box 416 70 Lodi Estate New Delhi 110 003

India

Tel: (91-11) 4690488; 4690489 Fax: (91-11) 4628250; 4619393

Regional Water and Sanitation Network for Central America c/o UNICEF P.O. Box 525-01901 Guatemala City Guatemala Tel: (502) 2 336373

Fax: (502) 2 336317

Water and Sanitation Program Office for Latin America
Banco Mundial

Casilla 9692 La Paz Bolivia

Tel: (591-2) 391 939 Fax: (591-2) 392 769

#### Trainers in PROWWESS participatory techniques

Linda Abrams
Institute for Training and Development
48 N. Pleasant Street, Suite 202
Amherst, MA 01002
USA

Tel: (413) 256 1925 Fax: (413) 256 1926

E-mail: ITD@External.UMASS.EDU

Dermé Alassance Ministere d'Etat d'Action Sociale 01 BP 2619 Ouagadougou Burkina Faso Tel: (226) 30 68 22/41 43 03

Dianne Arboleda Training Network Center, ITN/Philippines 4th Floor LWUA Katipunan Road Blara, Quezon City Philippines

Tel: (63 2) 951-757 Fax: (63 2) 922 3434 Mr. Akbar Sher Babar 514/A/34A Madrassa Road Quetta Pakistan Tel: (91 81) 821760

Cheick Ba s/c Directeur de l'ENEA BP 5081 Dakar Senegal Tel: (221) 22 99 57 or 32 14 47

Phoebe Baddu
South West Uganda Integrated
Health and Water Project (SWIP)
P.O. Box 1216
Mbarara
Uganda
Tel: (256 485) 21035, 20756
Fax: (256 485) 20757

Maria C. Bustillo Apartado Aereo 53053 Barranquilla Colombia Tel: (57 58) 348061 Luz Gonzáles Calderón Calle Pando No 339

Potosi Bolivia

Tel: (591 62) 24074, 26349

Patricio Canton Apartado Postal 11, Tepoztlán Morelos C.P. 62550

México

Fax: (91 5) 554 0698 (México D.F.)

Fax: (91 73) 162445 (Cuernavaca, Morelos)

Margarida Cardosa C.P. 47 Praia Republica de Cabo Verde

Tel: (238) 613 902 Fax: (238) 614 503

Virginia Chumacero Calle Daniel Zambrana No 28

Potosi Bolivia

Tel: (591 62) 24124

Leon Clark 4104 Lester Ct. Alexandria, VA 22311 USA

Tel: (703) 379 8043 Fax: (703) 379 5345

Camila da Costa Deputy Director, ACDIL Alto Betim Goa 403501 India

Tel: (91 832) 7862

Mrs. O. T. Rema Devi Socio-Economic Unit (North) Malaparamba Kozhikode 673 009 India

Coulibaly Djénéba 06 BP 941 Abidjan 06 Cote d'Ivoire Tel: (225) 41 58 95

Phyllis Dobyns 2 Bluewater Hill South Westport, CT 06880 USA

Tel: (203) 454 5855

Averthanus L. D'Souza 2\26 Sarva Priya Vihar New Delhi 110 016 India

Tel: (91 11) 665 627

Jamela Dube Senior Tutor Domboshawa Training Centre P. Bag 7746 Causeway, Harare Zimbabwe

Tel: (263 4) 882 245 ext. 125

Petronia Enriquez
Training Network Center, ITN/Philippines
4th Floor LWUA
Katipunan Road
Blara, Quezon City
Philippines
Tel: (63 2) 951-757
Fax: (63 2) 922 3434

Ayele Foly B.P. 494 Lome Togo

Tel: (228) 21 37 11

Gladys Cortés Gumucio Calle Natalio Aguirre No 464 Oruro Bolivia Tel: (91 52) 51299

Mr. Mohammed Siraj ul Haq Head of Section Human Resource Development Baluchistan Rural Support Programme 5-A Sariab Road Quetta

Tél: (91 81) 442153

Mr. Manzoor Hussain c/o Agha Khan Health Service Domiyal Link Road Gilgit Pakistan Tel: (91 572) 2958

Vathinee Jitjaturunt UNICEF No. 12 Salitun Lu Beijing 100 600 People's Republic of China Tel: (86 1) 532 3131

Fax: (861) 532 3107

Raju Joshi 9/378 Bhedasing Kathmandu Nepal

Tel: (977 1) 416093

Munguti Katui-Katua
Principal Consultant
Community Management and Training Services
(EA)
P.O. Box 292
Kiserian
Kenya
Tel: (254 2) 890495

Taddesse Koyra
Community Participation Promotion Section
Water Supply and Sewerage Authority
P.O. Box 5744
Addis Ababa
Ethiopia
Tel: (251 1) 611111; 185339; 185336
Fax: (251 1) 611730

Pascahl Lucas Kusare
Trainer and Personal Assistant to the
Commisioner for Water Affairs
Ministry of Water, Energy and Minerals
P.O. Box 9153
Dar es Salaam
Tanzania

Tel: (255 51) 31433-36 Fax: (255 51) 35734

Telex: 975 52198 or 975 52225

Rose Lideonde NETWAS/AMREF Wilson Airport P.O. Box 30125 Nairobi Kenya

Tel: (254 2) 50 13 01 Fax: (254 2) 50 61 12

Eugene Larbi
TNC/UST
Department of Civil Engineering
University of Science and Technology (UST)
Kumasi
Ghana
Tel: (233 51) 53 51 to 59
Telex: 2555 UST GH

Traoré Maimouna BP 3150 Bamako Mali Tel. and Fax: (223) 22 69 22

Nancy Anna B. Masumba
Director
Training for Rural Development Centre
P.O. Box 254
Iringa
Tanzania
Tel: (255 64) 2026

Mrs. Kochurani Mathew Socio-Economic Unit (South) Opp. A. R. Camp Kollam 691 001 India

Ms. Thresiamma Mathew Socio-Economic Unit (Central) Opp. Sakthan Thampuran Market Trissur 680 001 India

Aloka Mitra 10 A Alipore Avenue Alipore Calcutta 700 027 India Tel: (91 33) 479 5089 Fax: (91 33) 744 119

Mrs. Pramila Mohapatra c/o Office of the Chief Adviser 3130 Samantrapur Bhubaneswar 751 002 Orissa India

Mr. Anil Kumar Mohanty c/o Office of the Chief Adviser 3130 Samantrapur Bhubaneswar 751 002 Orissa India

Alfred Mondiwa
Zambuko Trust
Suite 26, New Africa House
40 Union Avenue
Harare
Zimbabwe
Fax: (263 4) 730 096

Mohamed Ali Muhungutwa

Principal Community Development Officer

MAJI/DANIDA, UBUNGO

P.O. Box 9171 Dar es Salaam

Tanzania

Tel: (255 51) 48174 or 48145

Fax: (255 51) 49898 Telex: 975 41923

David Mukama

Rural Water and Sanitation Project (RUWASA)

P.O. Box 20026

Kampala Uganda

Tel: (256 41) 220 560, 244 435

Fax: (256 41) 259 023 Telex: 973 62203, 62092

Noma Musabayane

Institute of Water and Sanitation Development

Department of Civil Engineering

University of Zimbabwe

P.O. Box MP 167, Mount Pleasant

Harare Zimbabwe

Tel: (263 4) 303211 ext. 1606

Fax: (263 4) 732828

E-mail: Noma@ZIMBIX.UZ.ZW

Wilfred M. Ndegwa

**Environmental Health Unit** 

NETWAS(ITN)/AMREF

Uganda Country Office

P.O. Box 51 Entebbe

Uganda

Tel: (256 42) 20217

Fax: (256 42) 20240

B.E.N. Okumu

**Training Officer** 

SHEWAS Project

CARE/Kenya

P.O. Box 606

Siaya

Kenya

Tel: (254 334) 21384

Fax: (254 334) 21245

Comfort Olayiwole

11A Sapara Williams Close

P.O. Box 75183

Victoria Island

Lagos

Nigeria

Tel: (234 1) 617522

Josiah Omotto

CARE-Kenya

P.O. Box 88

Kisumu

Kenya

Tel: (254 35) 41767, 41770

Fax: (254 35) 43820

Amadou Ouedraogo

**BP 7025** 

Ouagadougou

**Burkina Faso** 

Tel: (226) 30 15 06

Telex: 5473 BF

Jake Pfohl

UNDP-World Bank Water and Sanitation Program

c/o World Bank

P.O. Box 798

Kathmandu

Nepal

Tel: (977 1) 226 792

Fax: (977 1) 225 112

Teshome Regassa

**Environmental Health Department** 

Ministry of Health

P.O. Box 5504

Addis Ababa

Ethiopia

Tel: (251 1) 157299

Elisio Rodrigues

C.P. 132-c

Republica de Cabo Verde

Tel: (238) 614802

Fax: (238) 613202

Rosario Aguirre Rojas

Plaza Monteagudo No 30

Potosi

Bolivia

Tel: (591 62) 22914

Ms. Ismat Ara Saeed

House 284

Street 3 Q-8/2

Islamabad

Pakistan

Tel: (92 51) 282 530

Beatrice Sakyi Health Education Division Kumasi Metropolitan Assembly P.O. Box 1916 Kumasi Ghana Tel: (253 51) 4106

Mr. M. Samani CEP Team/WASHE Programme c/o Jaap Koot, Dept. of Water Affairs/NORAD P.O. Box 910022 Mongu, Western Province Zambia Tel: (260) 7 221 367 Fax: (260) 7 221 957

William Sampson 15 Twentieth Street South Odorkor Estates P.O. Box 1104 Damsoman Post Office Accra **Ohana** 

Ron Sawyer UNDP-World Bank Water and Sanitation Program c/o The World Bank P.O. Box 30577 Nairobi Kenya Tel: (254-2) 228 477 Fax: (254-2) 213 925

Mayling Simpson-Hébert Technical Officer, Hygiene Education Community Water Supply and Sanitation Unit World Health Organization Avenue Appia CH-1211 Geneva 27 Switzerland Tel: (41) 791 3531

Corazon Solomon ACFS Fdn. 12 Eleventh Ave. Murphy, Quezon City Philippines Tel: (632) 921 5182

Fax: (41) 791 0746

Fax: (632) 842-3423

Chris Srini Vasan RFD# 5 Box 372 14 Verona Place Mahopac, NY 10541 USA Tel: (914) 248 814

Lyra Srinivasan **ACDIL** Alto Betim Goa 403501 India Tel: (91 832) 7862

Awa Sylla 06 BP 941 Abidjan 06 Cote d'Ivoire Tel: (225) 41 58 95

Aminata Traore 06 BP 941 Abidjan 06 Cote d'Ivoire Tel: (225) 22 91 02

**Betty Soto Terrazas** Calle Beni No 150 Oruro Bolivia Tel: (591 52) 40410

Jane Vella Jubilee Popular Education Center 1221 Moultrie Ct. Raleigh, NC 27615 USA Tel: (919) 847 3804

David Walker **PACT** P.O. Box 390 Kathmandu Nepal Tel: (977 1) 412030

Fax: (977 1) 410881

Roshaneh Zafar UNDP-World Bank Water and Sanitation Group P.O. Box 1025 Islamabad Pakistan Tel: (92 51) 819 781

Fax: (92 51) 824807

e... 

## ACTIVITIES AND MATERIALS DEVELOPMENT

The individual activities within this tool kit were developed by Lyra Srinivasan (activities 1, 2, 3, 4, 7, 8, 10, 15, 16, 17, 18 and 19), Deepa Narayan (activities 11, 12, 13, 20, 21, 22, 23, 24 and 25), Chris Srini Vasan (activity 5), and Jake Pfohl (activity 14). Activity 6 was adapted from Kurt Lewin; the original concept for activity 2 was developed by Joe Huft and Harry Ingham. Activities not specifically credited have been developed through the efforts of many people in the field.

The photographs used in activity 5 are from the UN Photo Library.

Artists and participatory development practitioners in many countries created the prototypes of the materials contained in this kit. In acknowledging the contributions of the following individuals, we also acknowledge those individuals whose names, with the passage of years and changes in program management, are no longer on record. *Bolivia*: Betty Soto, Rosario Aguirre, Luz Gonzales, Gladys Corez and Gonzalo Quispe (all Yacupaj Project); *Ethiopia*: Wt. Selamawit Aboneh, Wt. Meheret Dawit and Ato Kidane Yelaq (Ministry of Culture); *Ghana*: Vincent Tay (Kumasi Health Education Division) and Ato McGrath (University of Science and Technology); *Kenya*: Mumia Auka (KWAHO), James Kut, Hillary Musioka, and James Mbugua (CARE) and Taffy Naisho (AMREF); *Mexico*: Alicia Sawyer (SARAR Capacitacion, AC) and Virginia del Campo Navarrete; *Pakistan*: Nina Zubair and Tehreema Aabvaan; *South Africa*: Colleen Cousins; *Tanzania*: Douglas Mboto and Jomo Kitundu; *Uganda*: Jessica Abakuo and Bob Mugsha (Ministry of Education); *West Africa*: Pierre Guiton.