Annex 1
FH/Kenya Barrier Analysis Results (July, 2002)

Behavior: Water purification through boiling or chlorination (Kenya, 7/02)	**Determinant #1: Perceived Susceptibility** (Can I get the disease/problem?)	**Determinant #2: Perceived Severity** (Is the disease/problem very serious?)	**Determinant #3: Perceived Action Efficacy** (Does the preventive action work?)	**Determinant #4: Perceived Social Acceptability** (Is the preventive action socially acceptable?)
To what degree is this a barrier? (- to +++++)	+++ Mothers believe that they and their children can get diseases from drinking dirty water, but they believe that clear water is pure water. They believe the borehole water is clean (but it is not even covered). They know that the water-pan water is not clean.	– Mothers believe that diarrhea is harmful and can kill people, especially children.	+++++ (chlorination) – (boiling) (More of a barrier with leaders than with mothers.) Lack of any knowledge on how to use bleach to purify water by both mothers and leaders. Both groups believe boiling works to purify water. Not sure if chlorination works to purify water.	++ Mothers: Only the educated people/ foreigners purify water right now. But not a negative thing to boil water. (No experience with chlorination.)
Current messages used that confront or work around this barrier	Only message related to this is the importance of purification of water by boiling. No specific messages on local quality of water or susceptibility of young children to waterborne diseases.	Diarrhea leads to dehydration. Emphasis is put on how dehydration can kill the child.	None	None
Messages that need to be developed or modified concerning this barrier	• Everyone, especially young children, can get diarrhea from water that is not purified. • Status of water in each community from water testing. • Impure water can kill children. (Use example of Laisamis community.) • Bacteria are so small that you cannot see them. Water that is clear may still be contaminated. Purify all drinking water to be safe. Water can become contaminated after drawing it from a clean source. • Children can get diseases easier than adults—they are weaker—and are more likely to die from impure water.	Add this message, even though it is not a barrier: • Diarrhea is one of the chief causes of death in children in Marsabit District.	• MOW uses chlorine bleach to purify water, which is highly effective. You should use chlorine bleach to do the same. • Addition of four drops of bleach per liter of water will purify the water. (Always add bleach after sieving the water to remove particles.) • After addition of bleach wait 30 minutes before consuming so that the bleach has time to kill the bacteria. • Sieving does NOT purify water – chlorinate or boil to purify.	Everyone can learn to purify their drinking water. It is a simple thing to learn and to do.
Changes to make in the project design given this barrier	Test water sources in each community for contamination. (Consider using Manja tubes for this, or invite university to test water.) Meet with Ministry of Water (MOW) to discuss water testing.	None	• Demonstrate purification process to all communities through *barazas*. • Meet with MOW to discuss intensive water chlorination program and collaboration in promotion of "bleach agents." Get World Health Organization (WHO) document on purification with bleach to share with the MOW. • CHWs sell bleach to communities.	None. Local bleach promoters may help with this. If this barrier persists, make a poster with a traditionally dressed woman adding chlorine to water saying "You can purify your water with bleach, too!"
Sample monitoring indicators	• % of mothers who can correctly report the results of the last water test in their community • % of mothers who know that the water receptacle is a place where water can become contaminated	No indicator needed at this point.	• % of mothers who believe that bleach can be used to purify water	No indicator needed at this point.

Annex 1
FH/Kenya Barrier Analysis Results (July, 2002)
(continued)

Behavior: Water purification through boiling or chlorination (Kenya, 7/02)	**Determinant #5: Perceived Self-Efficacy** (Can I do it? [Time, money/resources, knowledge])	**Determinant #6: Cues for Action** (Can I remember to do it? Can I remember how to do it?)	**Determinant #7: Perception of Divine Will** (Is it God's will that my child has the disease/problem? Is it taboo to do the behavior?)	**Determinant #8: Positive and Negative Attributes of the Preventive Action**
To what degree is this a barrier? (- to +++++)	++++ (boiling) +++++ (chlorination–never tried) • Mothers and leaders both say that it is very time consuming and expensive to boil water. There's a lack of firewood. • Neither group knew how to purify with chlorine. (Once it was explained, they said that it sounded easy.)	++ (boiling); +++++ (chlorination–never tried) Mothers sometimes forget to boil water, even when they want to boil it. Mothers do not know how to use bleach for purification.	– (Leaders) +++ (Mothers) • It is not God's will that children get diarrhea. (Leaders) • Children can get diarrhea from evil eye, and it is God's will. (Mothers)	+ (Leaders and Mothers) Mothers and leaders agree: Boiling is safe, and yields tasteless water, but is time-consuming and expensive. Chlorinated water is time-saving. The smell is not that good, but one can adapt. Bleach must be kept away from children.
Current messages used that confront or work around this barrier	None	• Boil all drinking water for children.	None	None
Messages that need to be developed or modified concerning this barrier	• Chlorination is the easiest, least-costly and least time-consuming way to purify drinking water. • Cost to purify with bleach is about 0.07 Shillings (7 cents) per liter. • Use teaspoon to measure bleach: 1 teaspoon per 20L of water. • If you are not measuring into a 20L can, you need to use a dropper: It's four drops of bleach per liter.	• Forgetting to purify water is dangerous—do it every day (boil or chlorinate). • Sieving water does not purify it. • Use teaspoon to measure bleach: 1 teaspoon per 20L of water. (Show teaspoon) • If you are not measuring into a 20L can, you need to use a dropper: It's four drops of bleach per liter.	• It is never God's will that children get sick and die. • Isaiah 65: 17-25 (God's will for the earth): "Never again will there be in it an infant who lives but a few days…." • When talking about water with communities, consider using these: Exodus 23: 25-26 Isaiah 41: 17-18	• Keep bleach where you keep medicines—out of reach of children. • Only have adults do the chlorination, not children. • Leave container open for 30 minutes to reduce smell. • To help with the taste, add a bit of fruit juice to the purified water in a separate cup when ready to drink. • Always taste before giving to children to check amount of bleach.
Changes to make in the project design given this barrier	Collaborate with MOW to get permission and help in promoting household purification with bleach. Demonstrate how to purify water with chlorine. "Bleach agents." CHWs sell bleach to communities.	• Demonstrate how to purify water with chlorine. "Bleach agents." • Use songs to teach process. • Develop stickers for house with proper dosing, safety and reminder to purify.	-	Put all standard messages on flip charts used in the health program.
Sample monitoring indicators	• % of mothers who purify their family's drinking water using bleach • % of mothers who can correctly describe how to purify drinking water using bleach • % of mothers who say that it is easy to purify water using bleach	No indicator needed at this point.	• % of mothers who believe that a child can get diarrhea from evil eye	No indicator needed at this point.

Annex 1
FH/Kenya Barrier Analysis Results (July, 2002)
(continued)

Behavior: Water purification through boiling or chlorination (Kenya, 7/02)	**Determinant #1: Perceived Susceptibility** (Can I get the disease/problem?)	**Determinant #2: Perceived Severity** (Is the disease/problem very serious?)	**Determinant #3: Perceived Action Efficacy** (Does the preventive action work?)	**Determinant #4: Perceived Social Acceptability** (Is the preventive action socially acceptable?)
To what degree is this a barrier? (- to +++++)	+++ Mothers believe that they and their children can get diseases from drinking dirty water, but they believe that clear water is pure water. They believe the borehole water is clean (but it is not even covered). They know that the water-pan water is not clean.	– Mothers believe that diarrhea is harmful and can kill people, especially children.	+++++ (chlorination) – (boiling) (More of a barrier with leaders than with mothers.) Lack of any knowledge on how to use bleach to purify water by both mothers and leaders. Both groups believe boiling works to purify water. Not sure if chlorination works to purify water.	++ Mothers: Only the educated people/ foreigners purify water right now. But not a negative thing to boil water. (No experience with chlorination.)
Current messages used that confront or work around this barrier	Only message related to this is the importance of purification of water by boiling. No specific messages on local quality of water or susceptibility of young children to waterborne diseases.	Diarrhea leads to dehydration. Emphasis is put on how dehydration can kill the child.	None	None
Messages that need to be developed or modified concerning this barrier				
Changes to make in the project design given this barrier				
Sample monitoring indicators				

Annex 1
FH/Kenya Barrier Analysis Results (July, 2002)
(continued)

Behavior: Water purification through boiling or chlorination (Kenya, 7/02)	**Determinant #5: Perceived Self-Efficacy** (Can I do it? [Time, money/resources, knowledge])	**Determinant #6: Cues for Action** (Can I remember to do it? Can I remember how to do it?)	**Determinant #7: Perception of Divine Will** (Is it God's will that my child has the disease/problem? Is it taboo to do the behavior?)	**Determinant #8: Positive and Negative Attributes of the Preventive Action**
To what degree is this a barrier? (- to +++++)	++++ (boiling) +++++ (chlorination–never tried) • Mothers and leaders both say that it is very time consuming and expensive to boil water. There's a lack of firewood. • Neither group knew how to purify with chlorine. (Once it was explained, they said that it sounded easy.)	++ (boiling); +++++ (chlorination–never tried) Mothers sometimes forget to boil water, even when they want to boil it. Mothers do not know how to use bleach for purification.	– (Leaders) +++ (Mothers) • It is not God's will that children get diarrhea. (Leaders) • Children can get diarrhea from evil eye, and it is God's will. (Mothers)	+ (Leaders and Mothers) Mothers and leaders agree: Boiling is safe, and yields tasteless water, but is time-consuming and expensive. Chlorinated water is time-saving. The smell is not that good, but one can adapt. Bleach must be kept away from children.
Current messages used that confront or work around this barrier	None	• Boil all drinking water for children.	None	None
Messages that need to be developed or modified concerning this barrier				
Changes to make in the project design given this barrier				
Sample monitoring indicators				

Annex 2: AED's "Exercise" Exercise (Using Doer/ Non-Doer Analysis)

annex 2

Objectives

Through this exercise, participants will have:

- distinguished between information-based health education and behavior-based prevention;
- reviewed the basic principles of behavior change planning, segmentation, benefits and barriers, determinants of behavior;
- practiced strategic planning based on behavioral data.

Time Needed

About 60 minutes but can be expanded or condensed a bit as time allows.

Set-up

Write each statement on a separate piece of flip chart paper. (You don't need to leave any room for participants to write on the paper—it's text only.)

Tape the statements one on top of the other so that sheets can be removed one-by-one, to reveal the sheet underneath. Hang up papers in three stacks around the room in the following sequence:

Blank sheet, #1, #4, blank sheet
Blank sheet, #2, #5, blank sheet
Blank sheet, #3, #6, blank sheet

Belief statements:
1) I believe regular exercise is a good idea for everyone. It reduces stress, keeps the heart and body fit, and reduces morbidity over time.

2) I believe regular exercise is most important for people with a history of heart disease or those trying to reduce their weight.

3) I generally believe in the concept of regular exercise, but think a healthy, active person gets all the exercise he/she needs without a formal routine.

change

AED

Action statements:

4) I regularly get 30 minutes of moderate cardiovascular or muscle strengthening activity four or more times every week.

[NB: If ***very*** few participants get 30 minutes of moderate cardiovascular or muscle strengthening activity four or more times weekly, then you can change the action statement to say, "I get 30 minutes of moderate cardiovascular or muscle strengthening activity, two or more times every week." Even though this is not the ideal behavior, this will enable you to compare the two groups. If you do this, you will need to modify the other instructions that follow to correspond to this new criterion.]

5) I exercise periodically, when the opportunity arises, about once every week (swimming, jogging, walking, playing sports with friends or family, etc.).

6) I frequently walk to the refrigerator, around the house, to the corner for a soda/cola. (I'm not a regular exerciser at all.)

Facilitator Instructions

Turn to the papers around the room.

Say: *Together, we'll run through an exercise that will illustrate some of the fundamental principles of behavior-based prevention strategies.*

Let's pretend: We operate a community health promotion program that aims to increase community use of prevention. Our research has shown that adults who exercise regularly (four times a week, 30 minutes each time) have fewer serious medical problems. So our goal is to get more adults to exercise regularly. Because we are fundamentally committed to involving our community in planning, it's appropriate that together, as a group, we plan our education strategy.

What should we do to educate our community to exercise more?

If the group doesn't offer (or summarize if they do offer): [Add:] To plan our program, we need to know what factors will most influence our community's exercise behavior.

Explain that there are **three belief statements** posted on the walls. Have participants read them out loud. Ask each participant to **stand near the statement that most approximates his/her beliefs**. Observe and comment. Demographic observations? By profession? Gender? Region? Other?

Belief statements:
1) I believe regular exercise is a good idea for everyone. It reduces stress, keeps the heart and body fit, and reduces morbidity over time.

2) I believe regular exercise is most important for people with a history of heart disease or those trying to reduce their weight.

3) I generally believe in the concept of regular exercise, but think a healthy, active person gets all the exercise he/she needs without a formal routine.

Now have them **read the action statements** and ask folks to reposition themselves according to what they actually do. Any differences? Observe and comment. Demographic observations? By profession? Gender? Region?

Action statements:
4) I regularly get 30 minutes of moderate cardiovascular or muscle strengthening activity, four or more times every week.

5) I exercise periodically, when the opportunity arises, about once every week (swimming, jogging, walking, playing sports with friends or family, etc.)

6) I frequently walk to the refrigerator, around the house, to the corner for a soda/cola. (I'm not a regular exerciser at all.)

Make the point that what we think and believe is often quite different from what we do. [Put up instruction sheet.]

On the form provided, each person should **answer the seven questions** that explore what they feel are the **benefits of and barriers to regular exercise**. You will have 10 minutes.

Two important things to keep in mind:
1.) Answer according to YOUR OWN THOUGHTS AND FEELINGS. Don't try to represent others; just what you think.

2.) No matter how much you actually exercise, you are merely listing the benefits of and barriers to doing the behavioral objective: exercising four times a week, 30 minutes each time. So even if you don't exercise, you are listing what good things would happen if you DID exercise regularly.

Then we'll take a break, and have some volunteers help us quickly analyze the surveys.

change

Now think back to our original mission. [review it]

AED

Let's pretend: We operate a community health promotion program that aims to increase community use of prevention. Our research has shown that adults who exercise regularly (four times a week, 30 minutes each time) have fewer serious medical problems. So our goal is to get more adults to exercise regularly.

How would you target your program to attain this program goal?

Things that come up include whether to target the group needing the most change, or those most primed for change, or even reinforcing good behavior. Usually this is a good opportunity to talk about numbers (start where most people need change) or those most at risk (though fewer in number). Make sure to talk about identifying the key factors that distinguish Doers from Non-Doers, not to "pick" something to promote that doesn't seem to be the key difference between doing and not doing.

Review the concepts of exchange, benefits and barriers, Doers/Non-Doers. Underscore how this helps prevention planners develop a program strategy.

**Annex 3:
Trainer Instructions
for Coding and
Presenting "Exercise"
Exercise Results**

annex 3

You will use the coding guides in Annex 4 to tabulate the responses from the participants' questionnaires and prepare a newsprint sheet or a slide that reports selected results. You will need a calculator for this work. Here's what you need to do:

1. **Divide the sheets into two stacks:** those who reported exercising four or more times in the last week versus those who reported exercising three or fewer times. Flip over the stack of questionnaires from those who reported four or more; on the question side of each questionnaire (the second page of the questionnaire [see page 93]), **mark each sheet** with a "D" for "Doer." For the stack from respondents who reported three or fewer, mark "ND" for "Non-Doer" at the top of the second page. Note the total in each stack, and write them in the first row of each page of the coding guide under "Doer Count" and "Non-Doer Count."

2. **Tabulate the data.** Keep the stacks separate and divide each stack up among those tabulating the responses. Have each tabulator work with one coding guide, which covers a pair of questions (advantages/disadvantages; easier/more difficult; approves/disapproves). The tabulator should look at each participant's responses and try to find the same or a very similar response on the coding guide. He/she should place a tick mark next to that response in either the "Doer Count" or "Non-Doer Count" column of the coding guide, depending on the stack from which it came ("D" or "ND"). At the same time, he/she should check off the response on the questionnaire, indicating that the response has already been counted.

Tabulators will register a tick mark for each different response, even if some seem similar.

The coding guides were developed based on responses given during pretests of the survey instrument and should reflect most potential answers. **Try to fit responses into one of the response categories in the guide.** If you find a genuinely different response, write it on the "Other" line and add a tick mark in the appropriate column.

As tabulators finish with a set of questionnaires, they should trade questionnaires with each other and follow the same process on the next set, until all the responses have been tabulated.

3. Once all questionnaires have been tabulated, **calculate percentages for each possible response**. To do that, first write down in each cell the total number of tick marks in that cell. Then calculate percentages by using the total number of Doers as the denominator for the "Doer" column. Record the percentage in the "Doer %" column. Use the total number of "Non-Doer" questionnaires as the denominator for the "Non-Doer" column. Record the percentage in the "Non-Doer %" column.

4. Then **select five or six of the most interesting findings**, such as responses that were very different between Doers and Non-Doers, or responses that were surprisingly similar between Doers and Non-Doers. Think ahead to points you will want to cover in the discussions so you have research findings that allow you to cover those topics.

5. **Prepare your presentation.** Important points to make in the discussion will include:

- When Doers and Non-Doers report similar percentages for any item, that item is not a likely determinant of the behavior for this audience.

- When Doers' responses are radically different from Non-Doers' responses, that item is likely a determinant of the behavior for this audience.

- Knowledge about the health benefits of the behavior is likely to be similar among Doers and Non-Doers, and therefore not a practical focus for an intervention.

- Doers' responses may include ideas for strategies on how to make the behavior easier or more appealing, and could provide clues for messages to Non-Doers.

- Sometimes, more Doers list a particular disadvantage of the behavior than do Non-Doers. This may simply indicate that the Doers are more familiar with the behavior. Despite familiarity with the disadvantage, they have overcome it to be Doers. Program planners will need to consider whether a difference between Doers and Non-Doers in this case indicates an item that the intervention should address; they may need to talk further with Doers and Non-Doers to determine what to do with such data.

- Looking at differences between Doers and Non-Doers as to who approves or disapproves of the behavior may provide important information on how to develop an intervention.

- List the selected findings on a sheet of newsprint in column 1, as shown below. Report the percentage of Doers and Non-Doers for those findings in columns 2 and 3. Leave the "Implications" and "Focus" columns blank.

Your finished newsprint should look something like this:

Finding	Doers %	Non-Doers %	Implications	Focus?		
				Y	N	M
Advantage: Health	80%	82%				
Disadvantage: Takes time from work	40%	27%				
Easier: Getting into a routine	60%	36%				
Difficult: I am not motivated	36%	80%				
Difficult: I have no time	0%	54%				
Approve: Me	40%	54%				
Disapprove: Family	0%	54%				

Annex 4:
Coding Guide for
"Exercise" Exercise

annex 4
coding guide for good things

Advantages or good things	Doer Count	Doer %	Non-Doer Count	Non-Doer %
Total Doers and Non-Doers				
Health benefits/feel healthy				
Lose weight/control weight				
Can eat more (without gaining weight)				
Look better				
Reduce stress/more relaxed				
Feel better/more energy				
Sleep better				
Meet new people				
Get to socialize				
Feel safer (feel you could run or fight if attacked)				
Exercise is fun				
Other:				

coding guide for disadvantages or bad things

Disadvantages or bad things	Doer Count	Doer %	Non-Doer Count	Non-Doer %
Total Doers and Non-Doers				
Takes up time				
Cuts into time with my family or friends				
Cuts into to work time				
Get sweaty/dirty				
Might hurt myself				
Get tired				
Costs money				
Get lonely				
Not fun				
Other:				

coding guide for easier

change

AED

Easier	Doer Count	Doer %	Non-Doer Count	Non-Doer %
Total Doers and Non-Doers				
Convenient location (either health club or outdoor spot)				
Convenient hours for pool or gym				
Having a variety of exercise options				
Safe place (free from physical danger)				
Getting into a routine				
Planning				
Low cost				
Having an exercise buddy/partner				
Seeing results (stronger, slimmer, less stress, etc.)				
Motivation				
Employer/work flexibility				
Family support/flexibility				
Nice weather				
Other:				

coding guide for more difficult

More difficult	Doer Count	Doer %	Non-Doer Count	Non-Doer %
Total Doers and Non-Doers				
Have no time/my schedule does not allow it				
Family and friends demand time				
Busy at work				
Not motivated				
Too tired				
Get sweaty/dirty				
Might injure myself				
Gain weight				
No safe place to exercise				
There is bad weather				
Don't have someone to exercise with				
Have no place to exercise/ not convenient				
Gym or pool is not open/ inconvenient hours				
Have to pay				
Other:				

coding guide for approves

People who approve of my spending time exercising	**Doer Count**	**Doer %**	**Non-Doer Count**	**Non-Doer %**
Total Doers and Non-Doers				
Doctor/health professional				
Spouse/partner				
Children				
Parent or other family				
Employer				
Coworkers				
No one				
Me				
Friends				
Everyone				
Other:				

coding guide for disapproves

People who disapprove of my spending time exercising	**Doer Count**	**Doer %**	**Non-Doer Count**	**Non-Doer %**
Total Doers and Non-Doers				
Doctor/health professional				
Spouse/partner				
Children				
Parent or other family				
Employer				
Coworkers				
No one				
Me				
Friends				
Everyone				
Other:				

change

AED

Annex 5: Participant Survey for "Exercise" Exercise

annex 5

change

AED

Think about the last full week that you were home, that is, before traveling for this workshop. Now, thinking about that week, how many times did you exercise for at least 30 minutes? By exercise, we mean any physical activity that increases your heart rate.

Number of 30-minute periods of exercise over the last week: _____

Now turn this sheet over and, following the instructions at the top, complete all questions.

Continue survey on next page>>>>>>>>

We'd like to ask you some questions about your perceptions of what happens when you get 30 minutes of exercise—that increases your heart rate—at least four times every week. Keep in mind that many people exercise less than that. Answer for what it's like—or would be like—to get 30 minutes of exercise at least four times every week. In answering the questions, respond for yourself (and not some hypothetical audience member). Please provide as many responses as you can for each of the following questions.

What do you see as the **advantages or good things** about getting 30 minutes of exercise at least four times every week?

What do you see as the **disadvantages or bad things** about getting 30 minutes of exercise at least four times every week?

What makes it **easier** for you to get 30 minutes of exercise at least four times every week?

What makes it **more difficult** for you to get 30 minutes of exercise at least four times every week?

Who (individuals or groups) do you think would **approve or support** your spending time getting 30 minutes of exercise at least four times every week?

Who (individuals or groups) do you think would **disapprove or object** to your spending time getting 30 minutes of exercise at least four times every week.

Annex 6: Developing Question Guides for Barrier Analysis Using Focus Groups

annex 6

Here are the steps to preparing good questions to use during Barrier Analysis when using focus groups:

A. Review the eight determinants of behavior change analyzed in Barrier Analysis.

B. Write down the promoted behavior that you wish to study. This should be a behavior that has not changed much in the past in your project area despite your efforts to make a change (e.g., through health promotion) or a behavior that you have just begun promoting that is extremely important to your project's success. It should also be one that is highly associated with your goal (e.g., increased yield or decreased malnutrition).

C. Write down the problem or illness that you hope to prevent through the promotion of this behavior.

D. For each barrier, write questions that can be used to see if this barrier is, in fact, a barrier to the successful carrying out of the promoted behavior. Remember that we are generally not trying to establish, for example, whether or not a type of illness or problem is serious, but whether or not people *perceive* that the illness or problem is serious. We are trying to measure perceptions, and questions should be worded with that in mind. For example, we would not ask, "Is diarrhea a serious illness?" but rather, "Do you feel that diarrhea is a serious illness?" The first question may produce more "ideal answers"—what people have heard is true, what they should do, etc. The second question is more likely to get at the person's true feelings and behavior concerning the illness—what they believe and what they normally do in a given situation.

E. For some barriers, it would be best to start out with an open-ended question to explore the general situation. For example, if you are trying to influence when solid foods are added to a child's diet, you could say, "Tell me about how you fed your child during the first year of life," then ask specific questions about when certain things were done and why. Or for agriculture, you might say, "Tell me about what you do in your garden at the beginning of a growing season."

F. When asking about specific barriers, the following guidance may be helpful:

1. **Determinant #1—Perceived Susceptibility**
   For this barrier, you can start by exploring what people believe are the causes of the problem/illness that you are trying to prevent. For example:
   - What type of children usually become thin?
   - Are there things that mothers sometimes do with their children that make them become thin?
   - What are the things that cause low yields?
   - Why do some people produce more crops than others with the same amount of land?

   You can then ask more directly about whether the group thinks that they (or their children) are susceptible to the problem/illness. For example:
   - Has your child ever had diarrhea?
   - Do you think that your child could get diarrhea?
   - Have you had a year when your crop production was low?
   - Do you think that could happen this year?

2. **Determinant #2—Perceived Severity**
   Ask whether the group feels that the problem/illness is serious.
   For example:
   - When a child who is about two months old has diarrhea, is that a serious problem?
   - When an older child (e.g., a four-year-old) has diarrhea, is that a serious problem?
   - How serious a problem would it be if your harvest was (say) 20% lower this year than last year?
   - How serious a problem would it be if you were only producing 80% of what you could be producing?

   You can then use questions to try to determine how serious the group feels the problem can be if they were to have it:
   - Can diarrhea kill a child who is two months old?
   - Does diarrhea usually kill a child who is two months old?
   - When a farmer's cassava is infested with cassava mealy bug, how serious a problem is that? Can it wipe out most of his/her crop?

You can then use questions to find out if people feel that the problem can be easily treated. A person's perception about the severity of a problem is linked, in part, to how easy he/she thinks it is to treat. You need to establish how much energy and time people will devote to preventing a problem or illness. For example, in the U. S., many people at one point in history (prior to the AIDS epidemic) considered getting a sexually-transmitted disease to be a "nuisance," but not that severe of a problem. (Hence, they did very little to prevent it.) They knew that the disease could be severe (e.g., syphilis could cause blindness), but that it was easily treated and thus not usually severe. Questions could be used such as:

- Can diarrhea be easily treated? By whom?
- Can kwashiorkor/marasmus be easily treated? By whom?
- If your crops were infested with the cassava mealy bug, would it be difficult to get rid of them once you discovered the problem?

3. **Determinant #3—Perceived Action Efficacy**

You can look at some of the answers to questions used for Determinant #1 to find out if this is a barrier. (If respondents feel that the promoted behavior is not linked with the problem/illness, then they are saying that they do not think that the promoted practice will decrease the problem/illness.) For this barrier, you can also look for what they perceive ideal behavior to be concerning the practice:

- When should a mother start giving a child other drinks beside breast milk? Water? Other semi-solid foods?
- When is it necessary to plow a field?

You can then ask them directly if they think doing the promoted behavior will prevent the problem/illness. For example:

- What would happen to a child if you only breastfed him/her for the first six months of life, and gave no other foods, drinks or water?
- What effect does plowing a field have on the growth of the crops?

You can then look at the inverse situation. Does NOT doing the behavior lead to the problem/illness? For example:

- Do you think that giving a child foods or drinks before he is six months old leads to more diarrhea?
- Do you think that a farmer who does not plow his field will have a smaller harvest?

4. **Determinant #4—Perceived Social Acceptability**

To develop questions for this barrier, first reflect on who the people are that may have an opinion about your target group's practices (e.g., mothers of young children, farmers). Start by asking questions about who influences them. For example:

- Who do you talk to when you have questions about breastfeeding?
- Who has offered you advice on breastfeeding?
- Who do you talk to when you have questions about your farming practices?
- Who gives you advice about your farming practices?

Then ask what advice they were given from the people that they have mentioned. For example:

- How did the doctor or nurse tell you to feed your child when he/she was very young? What advice were you given?
- What did your mother tell you that you should feed the child?

Then you can probe using specific questions about the advice. For example:

- When did the doctor or nurse tell you that you should start to give your child other things aside from breast milk? What things did he/she suggest you give your child and at what age?
- How did the extensionist tell you that you could prevent cassava mealy bugs?

Then you can ask the person to predict what their network of friends and family members would think about the practice that you are promoting (without saying that you are or will be promoting it). For example:

- If you were to decide to breastfeed a child for six months without giving any other foods or drinks, what would your mother think of that? Do you think she would agree to your doing that?
- What would your neighbors think of you if you did that?
- What would the traditional healer say if you did that?
- Are there other people who would not agree to your doing that? Why would they not want you to do that?
- Are there other people who would approve of your doing that? Why would they approve of your doing that?

5. **Determinant #5—Perceived Self-Efficacy**

Ask what things would be necessary for the person to do the promoted behavior:

- If you wanted to breastfeed your child for six months without giving any other foods or drinks, what would make it easier for you to do that?
- What are the things that you would need in order for you to plow your field using animal traction?

Ask what things make it difficult (or would make it difficult) for the person to do the promoted behavior:

- What are the things that make it difficult (or would make it difficult) for you to breastfeed your child for six months without giving any other foods or drinks?
- What are the things that make it difficult (or would make it difficult) for you to plow your field using animal traction?

Ask how difficult the person thinks it would be to do the promoted behavior. For example:

- If you had those problems resolved, and assuming that you wanted to do it, how difficult do you think it would be to only give your child breast milk each day until he/she is six months old?
- If you had those things, how difficult do you think it would be for you to plow your field using animal traction?

Ask about ways that you know of to overcome some of the group's barriers to the promoted action. For example:

- Some people mentioned that they work outside of the home, and that situation would make it difficult for them to exclusively breastfeed... Do you know how to express breast milk from your breasts? Is it a good thing to express your breast milk? (Why or why not?)
- If you wanted to breastfeed your child for six months without giving any other foods or drinks, would it be possible for you to leave breast milk for your child when you leave the house (for example, when you go to the market)? What would make it difficult for you to do that?

You can also explore the acceptability of the behaviors that you plan to suggest for overcoming some of those barriers. For example:

- Let's say that you have a one-month-old child. If you were to express your breast milk each day to leave for your child, do you think your child would gain weight properly?

6. **Determinant #6—Cues for Action**
   Ask the group whether they think it is difficult to remember to do the action or to remember how to do the action (e.g., the steps). For example:
   - Now that I have explained how to make ORS, do you think you could easily remember how to make ORS for your child if he/she had diarrhea?
   - Do you think it would be difficult to remember to express breast milk for your child each day?
   - Now that I've explained it, do you think you could remember the procedure for keeping pests off your cassava plants?

7. **Determinant #7—Perception of Divine Will**
   Reflect on the causes mentioned earlier for the problem. Did people mention spiritual/magic causes for the problem/illness (e.g., evil eye)? If so, they may believe there are specific times that it is God's will (or the gods' will) that their child get an illness or disease. This has to do with the person's worldview. Ask people to compare those who have the problem and those who do not. For example:
   - Why are there children who become thin/malnourished, and other children who do not become thin/malnourished?

   Then ask specifically if they think it is ever/usually God's will (or the gods' will) that a person have a problem/illness. For example:
   - Is it God's will that some farmers have very poor harvests? Why?
   - Is it sometimes God's will that a person gets AIDS? Why?
   - Is it usually God's will that a person gets AIDS? Why?

8. **Determinant #8—Positive and Negative Attributes of the Preventive Action:**

Ask the participants to think of any positive attributes that they know of concerning the promoted behavior. Reflect on the possible positive attributes of the promoted behavior that are not directly connected to the outcome that is your goal (e.g., higher yield, less diarrhea). For example:

- Are there any benefits to the mother if she only gives her child breast milk for the first six months of life? If so, what benefits?
- Aside from possibly having better harvests, are there any other benefits or other positive things that you know of concerning the use of animal traction for plowing?

Then you can ask more specifically about their opinions on some of the possible positive attributes that you can think of. For example:

- Do you think that exclusively breastfeeding would save you money (if you tried it)?
- What do you think of the taste of ORS? The cost?
- Do you think that ORS is useful for anything else aside from treating diarrhea?
- Do you think owning an animal to use for plowing would provide you with other benefits?
- What would you use the money for if you owned a pig and sold it?

Then ask about negative attributes:

- What are the things about using chlorine to purify your water that you really do not like?
- What are the things about weeding that you really don't like, or think you would not like?

In addition to the questions that you use with groups, you could talk to people who have tried out the practice to see what they liked about it.

Annex 7: Examples of Proper and Improper Interviewing Techniques (Taken from APPENDIX J, INTERVIEWER'S GUIDE For KPC Rapid Survey Interviewing[7])

annex 7

Examples of Proper Interviewing Techniques

The following list describes techniques that should be practiced in all surveys:

a. Before asking questions, introduce yourself or have your guide introduce you, state the name of the organization you are working with and the general purpose of the survey.

b. Maintain the confidentiality of the survey. If there are people around the mother being interviewed, ask them politely to leave. (Local protocol, however, must be followed). Explain to the mother that she does not have to take part in the survey, that health services will not be withheld if she does not participate and that all identifiers will be destroyed following the survey. Gain the mother's consent to be interviewed before asking questions.

c. To begin with, ask each question exactly as it is written (or with any minor wording changes that were agreed upon during training).

d. Ask questions in a respectful manner; do not imply that some answers are "better" than others.

e. When an answer is unclear, ask the question again or ask it in a slightly different way, but be careful not to change the meaning—or "lead" the respondent into a particular response.

   For example, suppose a mother mentions that she gave her child "a special drink" during diarrhea. Do not ask a leading follow-up question such as, "Do you mean that you used ORS?" Instead ask an open question like, "What kind of special drink?" or, "What was in the drink?"

f. If an answer seems inconsistent with previous information given by the mother, or if there is some reason to disbelieve an answer, try to discover the truth by asking the mother another question or asking a question slightly differently. However, do not be overly persistent; a mother may change her answer just because persistent questioning suggests that the interviewer is dissatisfied with that answer.

g. Ensure that translations of questions are not leading, as some translations can prompt a particular answer.

[7] Weiss, Bill. [1996, August]. *KPC Training of Survey Trainer's Course.* Baltimore, MD: Child Survival Support Project.

Examples of Improper Interviewing Techniques

The following list describes several techniques that should never be practiced during a survey:

a. Not making sure that the respondent fits into the group that you are wanting to interview (e.g., mothers of children under 24 months of age).

b. Asking leading questions. For example, "Do you think diarrhea is a serious disease?" instead of an open question such as, "How serious a disease is diarrhea?" Note that these types of probing questions are perfectly acceptable for use in focus groups after a more open-ended question has been used. They are less acceptable, however, when used in individual interviews without open-ended questions being used first.

c. Not asking a question for the first time exactly as it is written on the questionnaire.

d. Explaining a question before a respondent indicates that he/she did not understand the question the first time it was asked.

e. Assuming an answer without asking the relevant question. Interviewers must follow the directions on the questionnaire and ask all questions unless instructed differently.

f. When asking a question about a mother's child, not including the child's name when asking a question, as directed on the written questionnaire.

g. Leading the respondent to a particular answer during follow-up questions clarifying a response.

h. Commenting positively or negatively about the respondent's answer. This includes facial expressions or other actions that also can imply positive or negative feelings.

Annex 8
Barrier Analysis Results Summary Table

Behavior:	Determinant #1: Perceived Susceptibility (Can I get the disease/problem?)	Determinant #2: Perceived Severity (Is the disease/problem very serious?)	Determinant #3: Perceived Action Efficacy (Does the preventive action work?)	Determinant #4: Perceived Social Acceptability (Is the preventive action socially acceptable?)
Is this a problem for Doers?				
Is this a problem for Non-Doers?				
To what degree is this a barrier? (- to +++++)				
Current messages used that confront or work around this barrier				
Messages that need to be developed or modified concerning this barrier				
Changes to make in the project design given this barrier				
Sample monitoring indicators				

Annex 8
Barrier Analysis Results Summary Table
(continued)

Behavior:	Determinant #5: Perceived Self-Efficacy (Can I do it? [Time, money/resources, knowledge])	Determinant #6: Cues for Action (Can I remember to do it? Can I remember how to do it?)	Determinant #7: Perception of Divine Will (Is it God's will that my child has the disease/problem? Is it taboo to do the behavior?)	Determinant #8: Positive and Negative Attributes of the Preventive Action
Is this a problem for Doers?				
Is this a problem for Non-Doers?				
To what degree is this a barrier? (- to +++++)				
Current messages used that confront or work around this barrier				
Messages that need to be developed or modified concerning this barrier				
Changes to make in the project design given this barrier				
Sample monitoring indicators				

annex 9

Using the results from your Barrier Analysis study, fill out the form below. Only include things in your plan that will focus on a determinant that you found to be a problem (i.e., a barrier) or a positive attribute of the action. Remember: you do not have resources to do everything, so focus on the priority activities.

WHAT KEY BEHAVIOR CHANGE MESSAGES WOULD YOU LIKE TO USE? (Give the full text of the message if possible. Otherwise, describe what you would include in the message.)

GIVEN THE RESULTS OF YOUR BARRIER ANALYSIS, WHAT SUPPORT ACTIVITIES AND CHANGES IN PROGRAM DESIGN WOULD YOU IMPLEMENT? (How could you use the positive attributes of the behavior [i.e., the action]—that you discovered in your analysis—to better promote the behavior? How could you confront each barrier—barriers you discovered in your analysis—with changes in your program design and support activities?)

**Annex 10:
Barrier Analysis
Exercise for Health**

annex 10

[This information can be used for the exercise in Session 23 (see page 73) in place of data collected during the practicum.]

1. **CAN I GET THE DISEASE? COULD THAT PROBLEM HAPPEN TO ME?**
   RESULTS: The people said that, yes, they and their children could get diarrhea and other bad diseases caused by bad water. However, they thought that their water was pure. Therefore, they were not susceptible to waterborne diseases in their given situation.

2. **IS THE PROBLEM VERY SERIOUS?**
   RESULTS: Yes, waterborne diseases are deadly.

3. **DOES THE PREVENTIVE ACTION WORK?**
   RESULTS: The people said, yes, purifying dirty water helped prevent diarrhea. Adding bleach and boiling works. They had not heard of adding iodine to water. However, they believed that their water sources were pure and did not need to be purified.

4. **IS THE PREVENTIVE ACTION SOCIALLY ACCEPTABLE?**
   RESULTS: There are no social taboos about purifying your water with bleach, iodine or boiling. Family members and neighbors would not think you were a snob or strange.

5. **IS IT EASY TO DO?**
   RESULTS: People said that it was not easy to do the preventive actions. They got their drinking water out of barrels, but the Health Promoters and MOH talked about purifying water in a gallon container (which most people did not have). They asked, "How would we purify water that we constantly put in and take out of a 55-gallon drum?" They said that boiling water was out of the question, since it was far too expensive and time consuming. And they could not get pure bleach in their community or nearby. You could buy bleach in the communities, and it was not expensive, but the store managers always watered it down to make more money. Community people could not be sure of the strength of the bleach that they were buying. There was no purified water in the fields where they cut cane, but the women did not take their youngest children to the fields, anyway. Older children would go with them, and this was a problem for them.

6. **CAN I REMEMBER TO DO IT?**
   RESULTS: People could remember to purify their water when they knew how, but they had trouble remembering how to do it (the process for purifying water). People had heard a host of different messages about how to purify water with bleach. People would say, "You use 5 drops to a gallon...or is it 20 drops? Or a 1/4 cup per barrel?" People could not agree, and it was obvious that there were too many messages floating around that confused people.

7. **IT IS GOD'S WILL THAT I (a) SHOULD NOT HAVE THE PROBLEM, OR (b) THAT I OVERCOME THE PROBLEM.**
   RESULTS: [This factor was not explored in the D.R. study. For the purposes of this exercise, assume that some mothers thought that diarrhea was due to "evil eye."]

8. **POSITIVE AND NEGATIVE ATTRIBUTES ASSOCIATED WITH THE ACTION.**
   RESULTS: There were quite a few negative attributes of using bleach to purify water. One was that it reminded women of washing clothes. Many people did not like the taste, either. Some people had heard that bleach was poisonous or could turn your skin white. On the other hand, they had heard good things about iodine and knew that some people had received it from the doctor ("so it must be good for you").

   TASTE TEST: They liked the taste of the iodized and raw water the best, and the chlorinated and boiled water the least.

Annex 11: Barrier Analysis Workshop Daily Feedback Form

annex 11–daily feedback

Please circle the numbers which best describe your view of <u>today's</u> workshop activities.

1. **To what degree did you <u>understand</u> today's workshop sessions?**

Understood very little — Understood a fair amount — Understood most everything

1 2 3 4 5 6 7 8 9 10

If you understood little of one or more sessions, what was the most difficult to understand and why?

_____

_____

_____

2. **How <u>useful</u> to you were today's workshop sessions?**

Not very useful — Somewhat useful — Very useful

1 2 3 4 5 6 7 8 9 10

3. **How helpful are the <u>materials</u> including handouts you received today?**

Not very helpful — Somewhat helpful — Very helpful

1 2 3 4 5 6 7 8 9 10

4. **Overall, how satisfied are you with the workshop sessions presented today?**

Very dissatisfied — Somewhat satisfied — Very satisfied

1 2 3 4 5 6 7 8 9 10

5. **To what extent do you feel that you will be able to apply the ideas and strategies that you have learned during this workshop to your work?**

Not at all — Somewhat — Very much

1 2 3 4 5 6 7 8 9 10

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Please list any comments, criticisms or recommendations on the back of this form.

Annex 11: Barrier Analysis Workshop End-of-Workshop Feedback Form

annex 11–end-of-workshop feedback

1. **Please provide your comments and offer suggestions for anything related to the workshop content, format or logistics.**

2. **What suggestions do you have for any future workshops?**

3. **How would you rate your satisfaction with the workshop trainers?**

Trainer #1: _____:

Very dissatisfied			Somewhat satisfied					Very satisfied	
1	2	3	4	5	6	7	8	9	10

Trainer #2: _____:

Very dissatisfied			Somewhat satisfied					Very satisfied	
1	2	3	4	5	6	7	8	9	10

What recommendations would you make to the trainers to improve their training methods?

_____

_____

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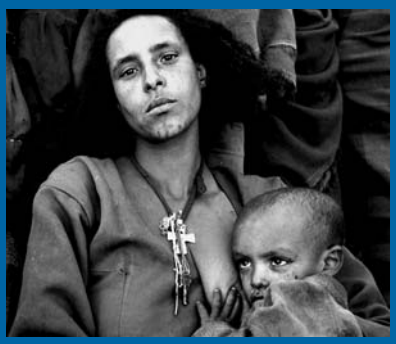
Annex 12: Description of Determinants of Behavior Change

annex 12

Determinant/Barrier	Questions to Examine
Perceived Susceptibility	Can I get the disease/have the problem? Could that problem happen to me?
Perceived Severity	Is the disease/problem serious?
Perceived Action Efficacy	Does the behavior work to prevent/overcome the disease or problem? Does the preventive action work?
Perceived Self-Efficacy	Can I do the behavior? Is it easy to do?
Cues for Action	Can I remember when/how to do the action? Can I (a) remember to do the preventive action and (b) remember the steps involved in doing the preventive action?
Perceived Social Acceptability	Do those who are important to me approve of the behavior? Is the preventive action socially acceptable?
Perception of Divine Will	Is it God's (or the gods') will that I (a) prevent or not have the problem, or (b) overcome the disease or problem?
Positive and Negative Attributes of the Action	What are the advantages of the behavior? What are the disadvantages of the behavior?



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CORE

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When working with community development projects, do you ever wonder why it's easy to change some behaviors and next to impossible to change others? Barrier Analysis is a rapid assessment tool that can help you identify behavioral determinants associated with a particular behavior so that more effective behavior change communication messages and strategies can be developed. Barrier Analysis also helps you to gain a better understanding of the differences between those people in a community who have already adopted a behavior and those people who have not yet made the choice to do so. By focusing on eight determinants, Barrier Analysis helps you gain a wide-angle view of why people are not choosing to change and design programs to help change occur. Barrier Analysis, developed by Food for the Hungry, has been used by many organizations on three continents to improve behavior change activities and to tear down barriers to behavior change. Barrier Analysis was originally designed for effective behavior change communication in child survival programs. However, it can be adapted for use in a wide range of domestic and international programs that include a behavior change component.

Copies of this Guide can be obtained by contacting:

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