



## PART 4: INFORMATION, EDUCATION, AND COMMUNICATION

- **BAHANGINAN Sample Materials**
- **IEC Project Planning and Budgeting**
- **Audience Research**
- **Materials Production**
- **Sample Survey Forms and Workshops**

## PART 4

# INFORMATION, EDUCATION AND COMMUNICATION

As informational materials are prepared – from the initial identification of need through the development of messages and the production of the piece itself – repeated interaction with representatives of the target audience is undertaken to ensure that the materials produced are accurate, well understood, and responsive to the audience’s needs and concerns. Fieldworkers and program managers should also be included in the materials development process to ensure that the final product meets their criteria and to give them a sense of “ownership” of the materials, thus increasing the likelihood that they will use the materials and will encourage others to do so.

This toolkit provides you with **information, education, and communication (IEC)** materials for a clean air program. The materials were produced by US-AEP in cooperation with the Environment Broadcast Circle (EBC) under the BAHANGINAN or Pagbabahagi Tungkol sa Hangin Project. The materials include the following:

1. A cassette tape and
2. An audio compact disc
  - a. *Iwasan – Smoke Belching* (Jingle 1)
  - b. *Malinis na Hangin* (Jingle 2)
  - c. *Payo at Babala* (Radio Plug 1)
  - d. *No Choice Ka Ba* (Radio Plug 2)
3. A digital video disc
  - a. *Iwas Polusyon* (30-second TV Plug)
  - b. *Usok Mo Langhap Ko* (AVP-Drama)
4. Comics – *Polusyon, Ano Ba ang Solusyon?*



As you will find out, you can immediately use these materials for a clean air campaign in your community, or you can do some adjustments to suit the local culture. The materials were prepared in a manner so that you can use materials in ways that fit with the locally available, popular, or active means of mass media.

Using campaign materials to promote air quality improvement programs has many advantages. Public awareness campaign materials:

- Come in many forms, such as print materials, radio plugs, videos, posters, and many others;
- Are an excellent tool to reinforce messages presented verbally during interpersonal contacts;

- Can be used as reference materials should the target audience or public forget any important messages;
- Provide a means for transmitting standardized information to an audience beyond the initial recipient, since clients often share the knowledge they gain through informational materials with friends, relatives, or neighbors;
- Are usually appropriate for local production and can be tailored for specific audiences;
- May serve as a motivator for those who wish to improve air quality.

This toolkit is designed to guide the reader step-by-step through the process of developing public awareness materials for various stakeholders in a clean air program. These techniques can be used to develop radio spots, videos, or theatre programs.

Each section of this Guide discusses a separate step in the materials development process.

- “Target Audiences” explains how to profile audiences and determine their specific needs.
- “Project Planning” offers tips for formulating work plans to allocate time and financial resources.
- “Audience Research” describes methods to derive information from the target audience to assess and better understand its needs and concerns, while “Message Development” details the process of using data from **focus group discussions (FGD)** and audience research to develop messages and communicate them pictorially in a clear, sequential manner.
- “Guidelines for Materials Production” provides tips that can be helpful when preparing materials for low-literate groups.
- “Pre-testing and Revision” explains ways to ensure that the intended messages are conveyed and that the materials are acceptable to the target audience.
- “Printing” raises issues to consider during the production stage of the materials development process.
- “Distribution and Training” describes how to disseminate the materials and train health workers to use them effectively with their clients.
- “Evaluation” describes methods to examine the field use of the materials and their impact on the intended audience.



## II. TARGET AUDIENCES

A “target audience” is a specific group of people whom materials developers like you are trying to reach. Project staff who are responsible for developing the materials must first define the target audience in order to develop materials that address the audience’s needs and concerns.

“Audience Needs” discusses the informational needs of different groups;

“Defining Audiences” describes how to identify a target audience by its demographic, geographic, cultural, and psychological characteristics.

### A. Audience Information Needs

When designing communication programs to introduce, promote, or institutionalize clean air programs, you should target the key groups that are vital to the fulfillment of the objectives of the program.

Audiences generally targeted by clean air programs include local chief executives, legislators, private and public vehicle owners and operators, tricycle and jeepney drivers, and private individuals, particularly smokers. These groups can be further subdivided as needed for a given program.

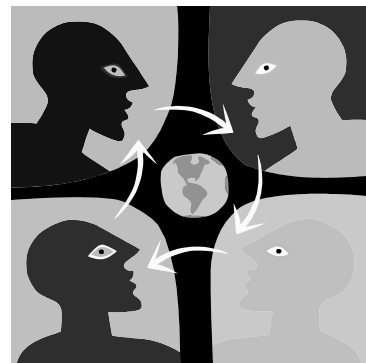
These main groups of service providers usually require different types of information at different levels of complexity.

**Policy and decision makers** need an objective presentation of a clean air program including its advantages, disadvantages, and the rationale. Sometimes policy and decision makers need very technical data, while at other times they need only a general overview.

**Program managers** who are responsible for relaying information between policy makers and field workers in the community need technical information, such as responsiveness of tricycle drivers to traffic management schemes, that is presented clearly.

**Fieldworkers** need accurate and standardized educational materials to support their interactions with the public and target audiences. Materials for fieldworkers are usually less technical than those for legislators and should include information to encourage the participation of stakeholders.

**Stakeholders** need information about the realities of air pollution and what can be done in terms of collective action. They also need to know about the effects of air pollution and how the different program options can contribute to the improvement of air quality.



Audience informational needs change depending on the audience’s stage of behavior. The stages of behavior adoption include: (1) awareness, (2) decision, (3) instruction, and (4) continuation.

During the first stage, a potential stakeholder becomes aware of the new air improvement behavior. Next, the audience makes a decision to participate in the program. If motivated, the audience will learn how to practice the behavior and apply it to daily life. During the final stage, the audience decides whether or not to continue the behavior. With this progression in mind, you should design messages using appropriate media to facilitate one or more of the stages of adoption.

Different media are more appropriate for certain audiences at different stages of the adoption process. For example, during the first phase (awareness), radio may be appropriate for reaching policy makers, program managers, fieldworkers, and the public. However, radio may not be useful for technicians or legislators, since they need very technical information, not suited for general audiences.

**Sample I**

Target Group	Stages of Behavior Adoption			
	Awareness	Decision	Instruction	Continuation
Policy Makers and Program Managers	I,N,P,R,T,V	I,N,P,R,T,V	I,P,V	I,N,P,R,T,V
Operators and Drivers	I,N,P,T,V	I,P	I,P,V	I,P,R,T,V
Fieldworkers	I,P,R,V (N,T)	F,I,P,R (N,T,V)	I,P,V	F,I,P,R (N,T,V)
Clients	F,I,P,R,V (N,T)	F,I,P,R (N,T,V)	I,P,V	F,I,P,R (N,T,V)
Key:	F = Folk media I = Interpersonal communication N = Newspaper P = Print		R = Radio T = Television V = Video ( ) = Where media is available	

**B. Defining Audiences**

Carefully defining the target audience will help to ensure that the intended audience is accurately represented when research is conducted to assess knowledge, attitudes, and practices. The audience can be defined by characteristics such as:

- Age;
- Gender (sex);
- Marital status;
- Occupation;
- Income;
- Religion;
- Ethnicity or language group; and
- Experience



If the target group includes a wide range of people, such as “vehicle operators,” it may be subdivided into smaller groups, for example, “tricycle drivers and operators”.

### III. PROJECT PLANNING

After the project staff has identified target audiences, a work plan and budget to schedule activities and allocate human and financial resources should be developed.

#### A. Work Plans

An example of a work plan to develop a public awareness campaign on clean air is illustrated below. The time needed to complete each phase of the materials development process varies depending on the scope of the work and the number of staff devoted to the project.

#### PUBLIC AWARENESS CAMPAIGN DEVELOPMENT WORK PLAN OF THE ENVIRONMENTAL BROADCAST CIRCLE (EBC)

Activity	Month												
	1	2	3	4	5	6	7	8	9	10	11	12	
1. Data Gathering and Baseline Survey	■												
2. Pre-Campaign Survey		■											
3. Pre-Production			■										
4. Production			■	■									
5. Audience Test				■	■								
6. Finalization				■	■	■	■	■	■	■	■	■	■
7. Placement and monitoring					■	■	■	■	■	■	■	■	■
8. Post – campaign survey										■	■	■	■
9. End of project report and documentation											■	■	■

The Environmental Broadcast Circle implemented the Public Awareness Campaign on the Health Effects of Air Pollution for Puerto Princesa. The package of activities was implemented with three major components: research, production and placement, and documentation. The following is a more detailed description of what was presented in the chart above.

#### A. Research

The campaign is conducted with a concrete basis that is gained from research. This gathering of information is purposively carried out to:

- Aid in conceptualizing the public awareness campaign,
- Set a baseline with which to assess the effectiveness of the campaign,
- Measure the effectiveness of the campaign in getting its message to the concerned publics, and
- Test the campaign materials for the appropriateness of content and form.

## I. Data Gathering and Baseline Survey

### Strategy:

- a. Gather information on the level of motor vehicle emissions and their effects on people and the environment with a particular focus on tricycle emissions and health effects and costs.
- b. Gather information on the extent of tricycle use for local transport and where these proliferate.
- c. Gather information on Puerto Princesa experience in reducing tricycle emissions.

### Methodology:

- a. Examine published materials, documentation, reports etc. from various sources, i.e., libraries, the Internet, government offices, NGOs etc., visit to Puerto Princesa.
- b. Conduct key informant interviews with transport and health experts and those who have done work in this area, including those involved in the Puerto Princesa experience.

## 2. Pre-Campaign Survey

The pre-campaign survey will gauge the level of awareness of pollution effects of transport, particularly tricycle transport, of target sectors and the general public. An area in Luzon can be chosen to save on cost. This is the area also where the public awareness campaign will be piloted and tested for effectiveness. The area should be chosen based on the predominance of tricycle use as public transport. The survey will involve interviewing respondents on their perception of the effect of tricycles in meeting local transport needs, on the local environment, on personal health, on traffic and on people's livelihoods. The respondents will likely be tricycle drivers and operators, the general public – both riding and non-riding, neighborhood associations (where applicable), local store owners at terminal points, traffic enforcers etc. Key informant interviews will also be conducted with local government officials. They will use a prepared structured questionnaire. The exact methodology and sample size will depend on local area characteristics.

## 3. Audience Tests

Prior to the finalization of all media materials, an audience test is conducted in order to determine if the materials clearly convey the intended messages and to gauge the effectiveness of the persuasive messages. The tests are conducted through focus group discussions (FGDs) involving representatives from the various target audiences for the materials, preferably in the pilot area chosen. A minimum of two FGDs per area are conducted, led by a facilitator and assisted by a documenter.

#### 4. Impact Assessment Survey

The assessment survey is like a mirror of the pre-campaign survey except that the interview questions are about the target public's reaction after being exposed to the awareness campaign, and is conducted towards the end of the project period.

### B. Production and Placement

#### 1. Pre-production

Using data gathered from the background research and baseline survey, the public awareness campaign is conceptualized. Scripts and storyboards, and the comics are prepared. Upon approval of drafts, production begins.

#### 2. Production

The media products consist of:

- A 10 minute audio-video presentation elaborating on the effects of air pollution, particularly from tricycles, and what citizens and local governments can do to mitigate the problem, showcasing how the City of Puerto Princesa was able to deal with the problem;
- A 30 second video plug designed for television airing;
- A 60 second audio plug designed for radio airing;
- A 60 second jingle for radio airing
- Printed materials designed for distribution to the general public presenting the issues in popular form and language, e.g., comics

### C. Documentation

After completion of the entire package of activities, the project holder consolidates a report summarizing the conduct of the campaign, with an assessment of how well it has achieved its main goals. The completed report is submitted with an edited video.

## B. Budgets

The sample budget in the following figure shows some items to consider when estimating costs. Each project will have different budget line items and costs reflecting local resources, staffing patterns, and institutional contributions clean air programs.

<b>IEC MATERIAL DEVELOPMENT BUDGET ITEMS</b>	
Objective: Develop, field test, revise, print, and evaluate a booklet for clients as indicated in the sample work plan.	
Personnel Cost Project Coordinators Project Director Support Staff Driver Benefits	Photocopying
Consultants Print material Artist Graphic Designer Translator Field Staff	Production Printing Production of Radio Program Production of Video
Transportation Training Focus Group Research Pre-testing Evaluation	Distribution and Training
Training Venue Refreshments Materials	Evaluation Questionnaires Conduct of interviews or FGDs
Communication Telephone Internet access Courier Fax	Administrative and Overhead Costs

## IV. AUDIENCE RESEARCH

Project staff must understand the target audience in order to communicate with them effectively. Project staff must find out what the audience already knows about the topic: what kinds of rumors or misinformation they have heard, how they feel about the topic, and what kinds of questions they have. Many techniques can be used to learn more about target audiences prior to developing messages. These techniques include knowledge, attitude, and practice (KAP)

surveys; in-depth individual interviews; informal group sessions (or meetings); and focus group discussions (FGDs).

### **A. Knowledge, Attitude, and Practice (KAP) Surveys**

KAP surveys are used when it is important to determine what percentage of people in a community believes certain things. Because the purpose of this method is to count the number of people fitting into different categories, it is called a “quantitative” technique. Some researchers are familiar only with this type of traditional research tool.

Surveys use a series of closed-ended or open-ended questions or both. Closed-ended questions offer the respondent several choices when answering a question on the questionnaire.

For example: “Do you use oral re-hydration salts (ORS) in your home? \_\_\_Yes \_\_\_No \_\_\_ No response.” Closed-ended questions limit the kinds of responses that can be recorded and can, therefore, bias the data gathered. For instance, what if the respondent really wants to answer, “I don’t know what oral re-hydration salts are”? However, closed-ended questions are often used because they are easy to ask and their results are relatively easy to analyze. Open-ended questions allow respondents to give any answer they like. For example: “What do you see in this picture?” Instead of a list of answers, a blank space is provided, and the interviewer writes down whatever the respondent says. This type of data is more difficult to analyze, since it requires the researcher to complete a “content analysis” of information gathered.



Surveys require many participants, randomly selected from various parts of the community. Many interviewers are also needed. For this reason, surveys can be very expensive and time consuming. Before planning to use surveys for audience research, project staff should ask themselves whether it is really necessary to know how many people believe something, or whether it is enough to know what kinds of things people believe. In the latter case, quicker and less expensive “qualitative” research techniques may be more appropriate.

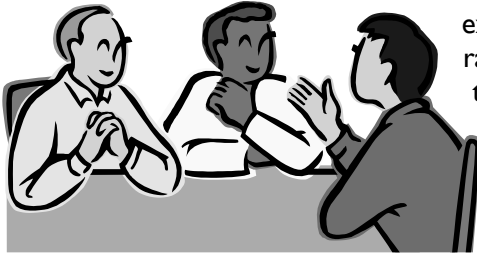
### **B. In-depth Interviews**

In-depth interviews allow researchers to gain a great deal of insight into people’s thoughts, feelings, and behaviors. Whereas a survey questionnaire may take only a few minutes to complete, in-depth interviews often take much longer because they allow the respondent to talk at length about topics of interest. Because in-depth interviews contain many open-ended questions, they require more time to analyze.

Data from in-depth interviews can be used to generate quantitative results if a large enough random sample is selected and if careful, reliable content analysis of the data is performed. If the samples are small or are not randomized to represent the community, in-depth interview data can still be used qualitatively, since the interviews will give researchers ideas about the informational needs of the community. Because of the complexity of sampling procedures and data analysis, and because of the length of the interviews, in-depth interview research can also be relatively expensive and time-consuming.

### C. Focus Group Discussions (FGDs)

FGDs are in-depth discussions, usually one to two hours in length, in which six to ten representatives of the target audience, under the guidance of a facilitator, discuss topics that are of particular importance to a forthcoming project or activity. The focus group is a research method borrowed from commercial marketing.



The results of focus group sessions are qualitative: they are an exploration of knowledge, beliefs, concerns, and attitudes rather than a quantitative tabulation of yes-or-no answers to close-ended questions.

The qualitative data generated by FGDs disclose “hints” for arguments that may be used to influence the audience’s behaviors or to allay their fears or doubts.

In cases where quantitative data are not needed and where resources are limited, the FGD is usually a very useful qualitative research tool. Because many people are interviewed at once, FGDs are usually cost-effective. Also, when FGD participants hear the thoughts of others, it can trigger their own memories or ideas, thereby enriching the data. However, because all the participants in the FGD can hear the opinions given by other participants, one cannot be sure that participants are giving the same kinds of answers in the group that they would give if interviewed individually.

For this reason, it is invalid to count the number of people in the group who give a certain answer; focus group results cannot be quantified in this way. On the other hand, it is valid for a researcher to count the number of FGDs in which a certain idea was mentioned. FGDs are often the audience research method of choice for materials developers. When designing a booklet, poster, or video, it is usually not important to know, for example, that 30 percent of the audience believes one thing about the subject, 25 percent believes another thing, and 45 percent knows nothing at all about it. No matter what the percentages are, the project staff probably would prefer to give the correct information and address misperceptions and questions. It is most important to know what the misperceptions and questions are; FGDs yield these data very effectively.

FGDs are easily tailored to suit the research needs of the project staff. For instance, FGD data can be used to:

- Develop appropriate messages for informational or motivational materials or media;
- Identify myths or beliefs about a product or practice;
- Evaluate existing materials or drafts of materials;
- Design survey questionnaires.

Conducting several FGDs with groups having similar characteristics will help to confirm findings and ensure that all common informational needs are addressed in the materials produced. In order to collect enough relevant information on a topic, two FGDs per participant characteristic are usually required. Sample participant characteristics include gender, age, and awareness in clean air programs.

## **SAMPLE FGD PARTICIPANT CHARACTERISTICS**

The following are some guidelines for improving the reliability of FGD results:

### **1. FGD Participants**

FGD participants should represent the audience for which the materials are intended. For best results, each focus group should contain people who share similar characteristics such as age, sex, and socioeconomic status. People are more relaxed among others with the same or similar backgrounds.

To help ensure that the responses will be spontaneous and uninhibited, participants should not know each other or be told the exact subject of discussion in advance of the FGD. The method of recruitment will depend on the situation: terminals or schools may be good places to find candidates. House-to-house recruiting is a better, albeit more time consuming, technique.

### **2. FGD Site**

FGDs should be conducted in a quiet place that is large enough to accommodate the participants, the facilitator, and the documentor. The setting should promote comfort and ease among group members. Participants should be seated in a circle so that the facilitator and documentor can clearly see and hear everyone and so that there is no “head of the table” leader image.

### **3. FGD Facilitator**

To establish rapport with the group members, the FGD facilitator should be of the same sex and speak the same language as the FGD participants and should have a thorough understanding of the topic to be discussed. The facilitator introduces topics and encourages everyone in the group to participate. The facilitator is responsible for guiding the discussion to make sure that participants do not stray from the subject. A good facilitator is personable, flexible, and has a good sense of humor.

### **4. FGD Documenter**

Even though FGDs are often recorded, the documenter objectively and carefully records both individual opinions and group consensus verbalized throughout the FGD.

The documenter also records nonverbal responses that could be indicative of group attitudes or sensitivities.

### **5. FGD Guidelines**

In order to cover all topics of interest, project staff must develop guidelines for the discussion prior to holding the FGD. Although discussion guidelines will differ depending on the group and their experiences, most FGD guidelines include: (1) introduction of the facilitator, participants, and FGD format; (2) general topics to open up the discussion; and (3) specific topics to cover.

## TIPS FOR THE FGD FACILITATOR

1. Open the discussion with a statement (e.g., “We all breath the same air...”) and wait for participants to comment. Starting with a question can make the group expect a question-and-answer session and discourage discussion.
2. Practice a form of “sophisticated naivety” (e.g., “Oh, I didn’t know that—can you tell me more about it?”).
3. Make incomplete statements and wait for responses (e.g., “Well, maybe smoking isn’t so...”).
4. Use silence to your advantage. Do not let it be intimidating; a pause in the conversation may compel participants to talk.
5. Use “close-ended” questions to solicit a brief and exact reply (e.g., “How many children do you have?”).
6. Use “open-ended” questions to solicit longer, thoughtful responses (e.g., “What have you heard about the clean air act?”).
7. Use “probing” questions in response to a reply in order to obtain further information (e.g. “Why should we implement a clean air program?”).
8. Avoid “leading” questions that prompt respondents to answer in a particular way (e.g., “Have you heard that carbon monoxide causes respiratory illnesses?”), unless they are part of your “probing” strategy.



## TIPS FOR THE FGD DOCUMENTER

1. The facilitator and the documenter should work as a team and communicate before, during, and after the FGD. Before the FGD, they should carefully review the FGD guidelines together. They should agree on non-verbal cues to use discreetly during the session to indicate which comments are important to note or require elaboration. After the FGD, they should collaborate to clarify notes and compare their impressions.
2. Do not let a tape recorder substitute for good note taking. Although sessions should also be tape-recorded, problems during recording are very common (e.g., too much noise, dead batteries, forgetting to turn over the tape); therefore, the documenter should always jot down notes.
3. The documenter should record only relevant information. The documenter should summarize what is said and record useful and interesting quotations when possible. The documenter may use abbreviations, including quotation marks under words to show repetition of comments.
4. The documenter should observe nonverbal group feedback (e.g., facial expressions, tone of voice, laughter, posture), which may suggest attitudes to be noted in FGD reports.

## **6. FGD Session**

After the facilitator and documenter introduce themselves, the facilitator should ask the participants to do the same. The facilitator should then explain the purpose of the session. The group is likely to feel more comfortable about note taking and tape recording if first asked for permission.

Assurance should be given that this is simply a way to help the project staff remember what was said and that the information is confidential and for the exclusive use of the project staff.

The facilitator should begin the FGD with general topics and then move to specific topics. The FGD guideline does not have to be strictly followed; it is used as a checklist to ensure that all the necessary items are discussed. The facilitator should allow the order of topics to vary depending on the group's interests and concerns. Toward the end of the session, the facilitator should help the group to sift through the ideas discussed in order to determine how the group stands on important issues. This is also a good time to summarize, clarify, and obtain any additional information needed.

Sometimes participants ask the facilitator questions or give incorrect information during the FGD. The facilitator naturally wants to help by answering questions or correcting errors. However, this should never be done during the FGD. Instead, the facilitator needs to throw the questions back to the group: "What do you think about Jun's question, Carmen?"

If a facilitator begins answering questions during the FGD, it will cause participants to stop giving their own ideas and will turn the FGD into a teaching session instead of a research activity. If participants persist in asking questions, the facilitator should assure the group that time will be set aside at the end of the session to discuss these issues. A good general rule to observe is that the facilitator should try to speak only 10 percent of the time and listen to the participants 90 percent of the time.

Refreshments may be served to the participants before or after the FGD as a friendly gesture to thank them for their time and help.

## **7. FGD Data Analysis**

FGD data analysis involves reviewing the statements made by participants on each topic in the FGD to determine what the target audience members already know, what misinformation they have, what they want to know, and what they need to know. FGD findings can be arranged according to the FGD guidelines. After all the FGDs have been conducted, responses can be compared according to the characteristics of the various groups. It is not appropriate to try to quantify FGD data by counting the number of participants in a group who gave similar answers.

If it is necessary to generate such statistics, KAP surveys or in-depth interviews should be used instead of FGDs.

## **V. MESSAGE DEVELOPMENT**

The process of message development includes several steps. First, project staff FGD data must analyze FGD data to determine the informational needs of the target audience (i.e., what FGD participants believe to be true and what they want to know). Next, messages must be designed,

based on the FGD data, to address the informational needs of the target audience (i.e., what project staff think the target audience needs to know based on the research results).

At this point, campaign materials can be drafted and illustrations created to communicate the messages. The text should be concise and should reinforce each illustrated message; likewise, the illustrations should help communicate the written messages.

**A. Analyze FGD Data and Design Messages**

Messages should be developed to address each relevant issue raised in FGDs. Project staff should list FGD data in the first column of the Message Development Worksheet (see following figure).

You should list messages that address the informational needs of FGD participants. As the project personnel strive to make these messages consistent with program policies and activities, assistance from technical advisors can help to ensure accuracy of the messages.



A good message is short, accurate, and relevant. The message tone may be humorous, didactic, authoritative, rational, or emotionally appealing. It may be intended as a one-time appeal or as repetitive reinforcement. It may provide inspiration to readers or merely attract their attention.

MESSAGE DEVELOPMENT WORKSHEET			
FGD Data	Message	Rendering (Illustration, Audio, Video)	Text Content
Motorcycle drivers want to know how to take care of their health.	Regularly maintain motorcycle engines and use clean fuel.	Posters, flyers, radio	You can take care of your health by regularly maintaining your motorcycles.
Passengers think that attaining and maintaining clean air is the responsibility of the government.	Passengers and other community members can actively contribute to the attainment of clean air.	Posters, flyers, radio	You can do something to help clean the air, report smoke belchers.
Local officials believe that apprehending smoke belchers will be enough to improve air quality.	An integrated approach is needed to implement a clean air program.	Brochures, technical briefs	A multi-sectoral and multi-strategy approach is necessary to implement and sustain a clean air program.

## **B. Develop Storyboard with Illustrations**

Having analyzed FGD data and determined the content of the messages, project staff is now ready to create illustrations to support the text. A brief description, in words, of illustrations that best depict each message should be listed in the third column of the Message Development Worksheet.

To give the artist a clear idea of what needs to be illustrated or prepared, a sequential layout of rough sketches needs to be prepared. A storyboard can help to visualize each aspect of the message and to outline the message sequence, frame by frame. Project staff can then work with local artists or photographers to determine how best to portray each message. The comics attached in Part 4b shows the artist the message that needs to be conveyed.

Project staff can prepare more than one version of the illustration or photograph if they are not sure how the message is best portrayed. This allows ideas to be compared for accuracy and effectiveness during pre-testing and, ideally, results in a new illustration that combines the best elements of each.

Decisions must also be made as to what kind of graphics and media to use: line drawings, shaded drawings, photographs, cartoons, videos, posters, jingles or other styles. Usually it is prudent to seek the advice of the target audience. This can be done through the use of individual pre-tests or FGDs.

Identical messages, using the same symbols, should be tested in several graphic styles to determine which style is most acceptable to the audience.

## **C. Draft Text**

Project staff should draft text conveying the messages and then write it in the fourth column of the Message Development Worksheet. The text should be written in the language of the target audience and should use vocabulary appropriate for that audience.

The text should be concise and should reinforce the information in the corresponding illustration. Occasionally FGD data reveal messages which are very difficult to portray pictorially. In this case, the text may expand slightly on the illustration. For example, in the message, “Total suspended particulates from tricycles cause more illnesses than the burning of solid waste”, it is very difficult to illustrate the concept of one pollutant being more harmful than another.

## **VI. GUIDELINES FOR MATERIALS PRODUCTION**

If appropriate, do design materials that are suitable for each geographic region of the country. Materials produced for national distribution may not be equally appropriate in all parts of the country.

### **A. Tips to Follow**

The following tips may be useful in developing public awareness materials for different clean stakeholders.

## I. Design/Layout

- **Present one message per illustration or medium.** Each piece should communicate a single, distinct message.
- **Limit the number of concepts/pages per material.** If there are too many messages, the audience may become restless or bored or may find the information hard to remember. Try testing different formats with members of your target audience to determine what is most appropriate for them.
- **Make the material interactive whenever possible.** Include question-and-answer sections that allow readers to “use” the information in the material. If the material is to be given to the reader to keep, leave a space for the reader’s name and include review or question- and-answer sections that encourage those readers who can write to actually write in the material.
- **Leave plenty of white space.** This makes the material easier to read, follow, and understand.
- **Arrange messages in the sequence that is most logical to the audience.** People who learn to read from left to right, top to bottom, as well as those who are not used to reading at all, will have different ways of viewing pages.
- **Use illustrations to supplement text.** Placing illustrations throughout the text makes the material more appealing and can help the reader to absorb the information presented.



## 2. Illustrations

- **Use appropriate colors.** Use colors that have been pre-tested with the intended audience. Colors have different connotations in different cultures. For instance, in some Asian countries, such as the Philippines, red is a symbol of warmth and happiness, while in parts of Africa, it is a symbol of death.
- **Use familiar images.** People understand and are attracted to pictures that seem familiar to them. Expressions, activities, clothing, buildings, and other objects in illustrations should reflect the cultural context of the audience.
- **Use simple illustrations.** Avoid extraneous detail that can distract the reader from the central message. For instance, it is easier to see a tricycle driver doing a regular motorcycle tune up against a plain background than against a crowded city street.

- **Illustrate objects in scale and in context whenever possible.** Although large pictures and text are easier to see, excessive enlargement of detail may diminish ones understanding of the message.
- **Use appropriate symbols.** All symbols should be carefully pre-tested with the target audience. People who have not been taught the meanings of symbols may not understand crosses, arrows, check marks, inserts, and balloons that represent conversations and thoughts. Likewise, symbols to represent time are culture specific: in some regions, calendar pages or moons and stars may be used to represent months.
- **Use appropriate illustrative and presentation styles.** Test different illustrative styles with the target audience. Photos without background detail are more clearly understood by some audiences than are drawings. When drawings are more appropriate, some audiences prefer shaded line drawings rather than simple line drawings. Similarly, cartoon figures may or may not be well understood, depending on the audience’s familiarity with cartoon characterizations.
- **Use a positive approach.** Negative messages may be alienating or discouraging rather than motivating.

### 3. Text

- **Use simple language.** Use short words whenever possible, and keep sentences short. Use the active rather than the passive voice. If there is a significant amount of text, draft materials may be tested with standard readability tests such as Smog or Fry. Proper pre-testing with the target audience usually will indicate whether the reading level of a material is appropriate for that audience.
- **Review repeatedly.** Restate important information, and include review sections whenever possible. This will help the reader to understand and remember the messages presented.
- **Choose a type style and size that are easy to read.** Choose a type style that is clear and easy to read, especially for audiences with low literacy skills. Choose a type size that is large enough for the audience to read.
- **Use upper-case and lower-case letters and regular type.** Text printed in all capital letters is more difficult to read, as is text set in italics. For emphasis, use underlining.

## VII. PRE-TESTING AND REVISION

Once messages are drafted and a series of visuals are prepared, interviews are conducted with representatives of the intended audience in order to test the messages and visuals; this is called “pre-testing” or “field-testing.” During pre-testing, an interviewer shows the materials to

members of the target audience and asks open-ended questions to learn if the message is well understood and acceptable.

Pre-testing should be done before the materials are finalized so that they can be revised based on the audience's reactions and suggestions. Most materials must be pre-tested and revised several times. Each new or revised version is tested again until the material is well understood by—and acceptable to—the target audience.

Pre-testing is crucial because illustrations and text can easily be misinterpreted, especially by audiences who have had little exposure to printed materials. Pre-testing helps project staff know whether the draft materials are understandable to the target audience.

For example, when shown the first illustration in the following figure, many respondents in the Palawan asked, “Why is that driver tuning up his tricycle in the middle of a street?”

### **A. Individual Pre-tests**

Whenever possible, pre-tests of materials for groups with low literacy skills should be conducted with only one target audience member at a time to ensure that respondent answers are not influenced by other people. As with FGD participants, pre-test respondents must be representative of the target audience. The same respondents should not participate in more than one round of pre-testing and should not be the same individuals who participated in the earlier focus group discussions.

This is to ensure that respondents have no prior knowledge of the intended messages being tested. Pre-test sites and times must be selected with the target audience in mind. Often it is more convenient to pre-test materials where participants work, reside, or pass time—such as market places, waiting areas or terminals, or schools—rather than at the pre-tester's office.



Like FGDs, pre-tests require a two-person team: an interviewer and a documentor. Usually, a team can conduct individual pre-tests with five to ten respondents a day, depending on the length of the material being pre-tested.

The text and picture of each message should be tested separately in order to obtain specific pre-testing results for each. One method is to print the text beneath the picture so that the text can be folded out of sight or covered while testing the picture alone. The page may then be unfolded so that the picture and text can be pre-tested together.

Give each individual message a number to refer to when pre-testing: “IA” and “IB” could be alternative versions of the same message. Once the pre-tester has selected a pre-testing site and identified a respondent, the pre-tester should introduce himself or herself, and the documenter, and explain that the purpose of pre-testing is to solicit comments from respondents in order to improve the material. The pre-tester should emphasize that he or she is testing the material, not the respondent.

When pre-testing, it is best to interview only one person at a time. Discourage onlookers since they may be distracting to the respondent. During pre-testing, the interviewer must:

- Ask questions that are “open-ended” rather than “closed-ended” and “probing” rather than “leading.”
- Be supportive of the respondent’s answers: use phrases such as “very good” and “you are doing a fine job” even when the respondent misinterprets the message the picture is meant to convey. If the respondent gets the idea that s/he is doing something wrong, s/he will stop talking and the pre-test will be invalid.
- Allow the respondent to talk freely without interruption, disagreement, or ridicule.

During early rounds of pre-testing, improvements needed in the drawings should become evident quickly. Therefore, it is usually not necessary to interview more than ten respondents before analyzing the results. In subsequent pre-tests, at least 20 respondents per round should be interviewed before revisions are made. During the final pre-test, it is preferable to use a mock representation of the material (final size, layout, and type size) as envisioned by project staff.

Following this final round of pre-testing, minor changes may be necessary, but comprehension and acceptability should be high enough to proceed with printing.

## **B. Pre-testing Forms**

There are several forms to help organize and gather data during pre-testing: the Pre-test Background Sheet, the Pre-test Data Sheet, and the Pre-test Summary of Results Sheet. These forms may be adapted to suit each project. Each form documents one round of pre-testing; the same procedures are used for all rounds of pre-testing until an “acceptable” version of the message is created.

### **1. Pre-test Background Sheet**

The Pre-test Background Sheet helps project staff record important information. The sample completed Pre-test Background Sheet shows how this form is used to record information about pre-test respondents. One Pre-test Background Sheet should be prepared for each round of pre-testing. Complete the information in the spaces just above the bold line before pre-testing.

Personal information about which some individuals may feel sensitive should be solicited tactfully. For example, after the interviewer approaches a potential respondent and explains the need to pre-test a particular material among people with limited reading skills, the interviewer may then inquire about the potential respondent’s educational level. If the person does not qualify, the interviewer should politely thank the person and continue to search for respondents who represent the target audience.

Information about each respondent should be recorded on the Pre-test Background Sheet before the interview is over. The same respondent number used on the Pre-test Background Sheet should be used on the Pre-test Data Sheet for each individual.

### **2. Pre-test Data Sheet**

One Pre-test Data Sheet should be completed for each message during each round of pre-testing. Information above the bold line should be filled out by project staff prior to pre-testing.

The letters “A,” “B,” “C,” etc., in the “Describe Picture” box correspond to major elements of the illustration. This shorthand system allows the interviewer to record responses quickly by simply listing the appropriate letters.

Everything below the bold line on the Pre-test Data Sheet is completed during and after pre-testing. First each respondent is assigned a number, which is recorded in the left column.

Before showing the picture to the respondent, the interviewer folds the text (if any) out of sight and asks questions about the picture. Next the interviewer unfolds the page and asks about the text. In the box labeled “What do the words mean to you?” the “R” should be circled if the respondent read the accompanying text; the “H” should be circled if the respondent heard the text read aloud by the interviewer. The respondent’s feeling about the message and suggestions for improvements should be listed in the next two boxes.

There are two criteria to determine whether a message is communicated successfully.

One is comprehension: Does the respondent see what s/he is meant to see in the picture, and does the respondent understand the accompanying text? The other is acceptability: How does the respondent feel about the picture and text, and what changes does the respondent suggest to make the message more culturally appropriate?

After the pre-test team completes a round of pre-testing, the coder should carefully read all the responses, determine whether the picture and text are “OK” or “Not OK,” and mark the appropriate box. This assessment should be based on:

- Comprehension (from the “What do you see?” and “What do the words mean to you?” boxes); and
- Acceptability (from the “How do you feel about the picture and/or words?” and “What would you change?” boxes).

A response to a picture is considered “OK” if the respondent correctly describes all major elements in the illustration, is comfortable with the picture, and suggests no changes. Similarly, a response to the text is “OK” if the respondent correctly states the meaning of the text and is satisfied with the way the message is stated. Otherwise, a response should be coded as “Not OK.”

Both criteria—comprehension and acceptability—must be satisfied for a picture or text to be labeled “OK.” If the respondent does not like the picture or suggests practical changes, the picture must be marked “Not OK” even if the respondent correctly identified all elements of the picture. The same condition applies to pre-tests of the text.

Project staff must determine what level of comprehension and acceptability constitutes an “OK” or “Not OK” message. Having coded each picture and text either “OK” or “Not OK” based on the two criteria, the question then becomes, how many “OKs” does it take to have a successful message? This question should be considered and the answer decided in advance by project staff. It is recommended that at least 70 percent of the respondents should be able to correctly interpret the visuals alone, and that at least 90 percent should be able to interpret the visuals with the text and find them both acceptable.

### 3. Pre-test Summary of Results Sheet

As soon as a round of pre-tests ends and the coding is completed, the person doing the coding needs to transfer the results to the Pre-test Summary of Results Sheet. Usually only one or two Summary of Results Sheets are needed to record data from all the messages pre-tested during one round.

Two separate lines should be used to record the results of the pictures (“P”) and text (“T”) for each message. For example, if there are several pages of a material being pre-tested, label the first line “IP” and record the comments for the picture of message No. 1 on that line. The second line should be labeled “IT” and contain the results for the text of message No. 1. Subsequent messages should be recorded as “2P,” “2T,” “3P,” “3T,” and so forth.

The person coding should calculate the percentages of “OK” and “Not OK” pictures and text based on the total number of pre-tests. This person should also summarize the suggested changes from the Pre-test Data Sheet in the right hand column of the page.

Once the individual messages have reached the desired level of understanding, the entire material should be reviewed by the organization(s) collaborating on the project, other institutions interested in using the material, and anyone else with authority to approve the material.

### C. Group Pre-tests

Group pre-tests are sometimes used as an alternative to individual interviews. Because literate persons are often more self-assured and not as likely to be influenced by other members of the group when reviewing materials, group pre-testing can provide invaluable information when testing materials intended for audiences with more schooling. Group pre-testing is also particularly effective for pre-testing materials containing primarily textual messages or other materials such as film scripts, audiocassettes, videos, rehearsals, or live performances.

Group pre-testing can help project staff to determine if materials that were previously developed by other groups meet project objectives. Criteria for evaluating existing materials include:

- Ease of understanding;
- Appropriateness of reading level;
- Acceptability;
- Quality of illustrations;
- Technical accuracy; and
- Cultural sensitivity.

If new materials are needed, it may be possible to borrow and test ideas from materials developed for other regions and adapt them. Care must be taken to include messages specific to the needs of the new audience (based on local audience research).

As in the case of FGDs, a pre-test group should include six to ten people who represent the target audience. The pre-tester should explain that the group's suggestions will be used to improve the materials. The pre-tester then asks each group member to take a turn reading a section of the material aloud. The pre-test team listens for words that the readers have difficulty reading or understanding. After one respondent reads a section (one page, for example), the pre-tester asks the whole group to discuss the section and to make suggestions for improving it.

The pre-tester may want to ask some general review questions to make sure that main points and concepts presented in the material are understood. Likewise, pictorial messages may be tested by asking members of the group what they see, having them read the accompanying text, and discussing whether the message and illustration address the same topic.

### **SAMPLE QUESTIONS FOR GROUP PRE-TESTS**

1. What information is this page trying to convey?
2. What does the text mean in your own words?
3. If there is a picture, what does it show? Is it telling you to do anything? If yes, what?
4. Do the words match the picture on the page? (Why or why not?)
5. What do you like/dislike about this page?
6. Are there any words in the text you do not understand? Which ones? (If so, explain the meaning and ask respondents to suggest other words that can be used to convey that meaning.)
7. Are there any words that you think others might have trouble reading or understanding? (Again, ask for alternatives).
8. Are there sentences or ideas that are not clear? (if so, have respondents show you what they are.) After explaining the intended message, ask the group to discuss better ways to convey the idea.
9. Is there anything you like/dislike about this booklet—use of colors, kinds of people represented, choice of foods used, etc.?
10. We want the materials to be as good as possible and easily understood by others.
11. How can we improve the pictures?
12. What other suggestions do you have for improving this material- pictures, words, or both?

### **VIII. PRINTING**

Producing print materials requires considerable effort by those who are responsible for developing and testing the material and those who actually print it. It is important to remember that a crucial phase in materials development begins when the item(s) to be printed go to the printer. Mishaps during this phase can jeopardize the results of developmental activities. It is worth spending time working closely with all people involved in printing the materials to ensure that they understand what you want the final product to look like, what you are willing to pay for it, and when you want the job completed.

Printing costs vary tremendously by country, subject, type of material (booklet, poster, flip chart, etc.), and format (size, colors, style). When preparing to print, always consider the following:

- Request cost estimates, references, and samples of work from at least three printers.

The printers will need to know:

- The size of the material.
- The number of pages of the material.
- The type of paper to be used for the pages and for the cover.
- The number of colors to be used in printing the material.
- Whether or not the material includes any photographs.
- The number of copies to be printed.

Consider the quality of each printer's previous work, the printer's responsiveness to deadlines, and the recommendations of other clients.

- When printing a booklet, find out from printers whether certain numbers of pages are more cost-effective to print. Sometimes booklets with a total number of pages that is a multiple of four can avoid wasted paper and higher costs. Pages printed on both sides are usually cheaper.
- Ask for advice about page sizes and choose the most cost-effective size based on the paper sheet regularly used by the printer.
- The type of paper is also important to consider when budgeting for printing. There are a number of different types of paper (e.g., bond, cover, colored, book). Every type of paper is also measured by weight. The heavier the paper is, the thicker it is. Bond is the cheapest paper in the United States for small print jobs (e.g., flyers and leaflets). Twenty-pound bond paper is usually the best bond weight for the price. For books, 60-pound "book" paper is economical. Colored paper is more expensive. For the cover of a booklet or pamphlet, consider using heavy book paper (70-pound) instead of cover paper; it is usually less expensive and saves on bindery costs.
- In pamphlets, paper folds should always be along the "grain" of the sheet to ensure ease of opening and to help the pamphlet lie flat when opened. In the printer's "price book" for paper, one of the dimensions of the size of the paper is underlined. This indicates the grain direction of the sheet and affects how the sheet folds.
- Carefully consider how many colors you can afford to use. Multiple colors will increase printing costs. Always count black as one color.
- If the materials will be copied or photocopied by other organizations, choose a format that is easy to copy (e.g., leaflets rather than stapled booklets).
- It is most cost effective to make drawings the same size as they will appear in the pamphlet; otherwise the printer must make reductions requiring either separate camera shots or photostats ("stats"). Stats are cheaper than separate camera shots. They are made by a commercial graphic art camera person.
- Be careful when printing a photo across a fold. More work is required to make sure the two sides match, which adds expense.

- If you want a colored illustration to extend to the sides of the page or into the fold of a pamphlet, expect additional cost. White type against colored or half-toned background also costs more.
- You may wish to print small quantities of the material initially, so that changes can be made if necessary. However, in some countries, this decision must be weighed against the lower unit cost of printing a larger quantity, as mentioned earlier.
- Project managers should retrieve negatives from the printer as soon as print jobs are completed. Store them in a cool, dark, and safe place in case the materials need to be reprinted at a later date.
- Camera-ready artwork should be accessible to staff artists so that necessary changes can easily be made, before the materials are reprinted.
- If possible, use black letters on white paper (as opposed to white letters on dark paper) for text, as this is easier to read.

## **IX. DISTRIBUTION AND TRAINING**

Once materials are developed, tested, and printed, it is important to train the users on how best to use these new teaching aids.

### **HOW TO USE PRINT MATERIALS**

#### **POSTERS**

- Display the posters in places of high visibility, such as churches, banks, kiosks, and gas stations. Put them in places protected from rain and wind. (Ask permission first so that your poster is not torn down and thrown out.)
- Use posters to stimulate group discussion.

#### **FLIP CHARTS**

- Always stand facing the audience when using a flip chart.
- Hold the flip chart so that everyone in the group can see it, or move around the room with the flip chart if the whole group cannot see it at one time. Point to the picture when explaining it.
- Involve the group. Ask them questions about the illustrations.
- Use text (if any) as a guide; do not depend on it. Memorize the main points and explain them in your own words as you show the picture.

#### **BOOKLETS AND BROCHURES**

- Explain each page of the material to the client. This allows the client to both observe the pictures and listen to the messages.
- Point to the picture, not to the text. This will help the client to remember what the illustrations represent.

- Observe clients to see if they look puzzled or worried. If they do, encourage them to ask questions and discuss any concerns. Discussion helps establish a good relationship and builds trust between you and your clients. Clients who have confidence in their health workers will often transfer that confidence to the method or health practice selected.
- Give materials to your clients and suggest that they share the materials with others, even if they decide not to use the method or health practice described.

The training process need not be elaborate or lengthy, but staff at all programmatic levels need to know why and how the materials have been prepared and why using them will make their job easier, more pleasant, more efficient, and more effective. As with almost anything new, unless people understand the advantages of the materials, the materials will not be used properly, or perhaps will not be used at all.

Set up systems for distribution and use of the materials so that they are used effectively. A common problem with attractive materials is that they may be used to decorate offices of colleagues instead of being given to members of the target audience for whom they were developed. Sometimes materials are deemed to be so important that they are carefully locked in a closet and never used.

Emphasize that the objective of materials development is distribution and participation of the intended audience. Set up a supervisory system that monitors extent and correctness of use.

## X. EVALUATION

Evaluation of materials is important because:

- It shows how community workers and clients actually use the materials.
- It shows whether the materials were effectively distributed.
- It provides more information about whether or not the materials are accepted and clearly understood by the target audience.
- It may prove to managers that the money allocated to information, education, and communication (IEC) was spent carefully and is a good investment.
- It allows the materials developers to adapt to the changing needs of target audiences.

To evaluate the effectiveness of the materials, one or more of the following methods may be selected:

- **Interview** clients who were introduced to the material by a fieldworker. Did they understand the material? Do they still have it? When do they use it? Have they shown it or given it to friends? How did the material affect their decision whether to use the product or practice the behavior? Can they recall the information contained in the material given to them?
- **Hold group discussions** to obtain feedback on materials from clients as well as service providers.
- **Observe** target audiences and stakeholders and program administrators to evaluate how materials are being used or how they are responding to the informational materials

- **Conduct intercept interviews** with stakeholders or potential partners in terminals, schools, or other public places to see what messages they heard or seen and whether or not they saw or heard the support material.
- **Give** the audience something in the material which requires him/her to take an action that can be measured, such as providing a coupon to purchase unleaded gasoline
- **Observe** clients practicing a new behavior that is promoted in the materials, such as regular vehicle maintenance or replacement of 2 stroke with 4 stroke engines.

When using these techniques, suggestions for improving the choice and representation of the messages may be solicited. When this stage of evaluation is completed, project staff will better understand how well the materials are understood, accepted, used, and distributed and whether the effectiveness of the materials justifies their cost.

### **How Puerto Princesa is Doing It**

TagBalay Foundation, Inc., a non-profit environmental organization based in Palawan, implemented the public awareness component of the Palawan Clean Air Program with two general objectives: (1) to encourage public participation and (2) to increase awareness of health effects of air pollution. These included the conceptualization and management of IEC campaigns through launching programs, press conferences, radio interviews and plugs, and print releases, trainings and workshops and advocacy for legislation.

**SURVEY**

**Puerto Princesa City's Clean Air Program  
Public Awareness Campaign  
(A Project funded by US-AEP, a program of USAID)**

Name: \_\_\_\_\_ Age: \_\_\_\_\_ Gender: \_\_\_\_\_ ID # \_\_\_\_\_  
Address: \_\_\_\_\_ Barangay: \_\_\_\_\_  
School/Office: \_\_\_\_\_ Course and Year/Designation: \_\_\_\_\_

Lagyan ng tsek  kung Oo; Hind; Hindi sigurado, and inyong kasagutan sa mga sumusunod na mga tanong.

1. Mahalaga ba para sa inyo na malinis na hangin inyong nilalanghap? \_\_\_\_\_ Oo \_\_\_\_\_ Hindi \_\_\_\_\_ Hindi Sigurado
2. Sa inyong palagay, malaki ba ang epekto sa kalusugan ng tao ang kalidad ng hangin na kanyang nilalanghap? \_\_\_\_\_ Oo \_\_\_\_\_ Hindi \_\_\_\_\_ Hindi Sigurado
3. Narinig o pamilyar bas a iyo ang Batas Republika 8749? O mas kilala sa Clean Air Act of 1999? \_\_\_\_\_ Oo \_\_\_\_\_ Hindi \_\_\_\_\_ Hindi Sigurado
4. Kung pamilyar ka na sa RA 8749, malaki ba ang maitutulong nito sa pagbabago ng kalidad ng hangin sa iba't-ibang panig ng bansa? \_\_\_\_\_ Oo \_\_\_\_\_ Hindi \_\_\_\_\_ Hindi Sigurado
5. Narinig o pamilyar bas a iyo ang Clean Air Program ng Lokal na Pamahalaan ng Lungsod ng Puerto Princesa? \_\_\_\_\_ Oo \_\_\_\_\_ Hindi \_\_\_\_\_ Hindi Sigurado
6. Sa inyong palagay, malaki ba ang maitutulong nito sa pagbabago ng kalidad ng hangin sa ating lungsod? \_\_\_\_\_ Oo \_\_\_\_\_ Hindi \_\_\_\_\_ Hindi Sigurado
7. Kung ikaw ay makakakita ng sasakyang bumubuga ng maitim na usok o tao na hindi sumusunod sa ordinansa ng \_\_\_\_\_ Oo \_\_\_\_\_ Hindi \_\_\_\_\_ Hindi Sigurado
8. pamahalaan na ipinagbabawal ang paninigarilyo sa pampublikong lugar, ano ang iyong gagawin, ipaaabot mo ba ito sa kinauukulan? \_\_\_\_\_ Oo \_\_\_\_\_ Hindi \_\_\_\_\_ Hindi Sigurado
9. Sa inyong pananaw, alin sa mga sumusunod ang may malaking kontribusyon o higit na nagdudulot ng polusyon sa hangin? \_\_\_\_\_ Oo \_\_\_\_\_ Hindi \_\_\_\_\_ Hindi Sigurado
10. Lagyan ng tsek ang kolum kung ito ay may pinakamalaking kontribusyon bilang 1; malaki bilang 2; at maliit o mababa lang bilang \_\_\_\_\_

	1	2	3
Tricycle			
Motorsiklo			
Pampasaherong Jeep o Cab			
Pribadong sasakyan			
Pagsusunog ng basura			
Paninigarilyo			
Mga Pagawaan			

Bilang isang responsableng mamamayan:

1. Ano ang maari mong maitulong o maging kontribusyon upang mabago ang kalidad ng hangin o mapanatili ang malinis na hangin sa syudad at sa buong bansa? (Lagyan ng tsek)
2. Ano ang iyong maimumungkahi para sa epektibong paglulunsad ng Puerto Princesa Clean Air Program?

Prior to the public awareness program, a survey was conducted and analyzed by TagBalay Foundation through their youth volunteers. This survey has been completed in 43 barangays, and 20 elementary and secondary schools, and is still ongoing in the rural barangays. The form presented here was utilized.

### **Hotline Bantay Buga**

Recognizing the importance of the LGU, industry, academe, tricycle operators/drivers, civil society, and the private sector, TagBalay created the Hotline System as a strategy to encourage public participation in the successful implementation of the PPC CAP. The hotline system was called HOTLINE BANTAY BUGA, a public complaint and action center created under the initial management of TagBalay Foundation through the City's Kilos Agad Action Center 117 Hotline.

Hotline Bantay Buga has the following mechanisms:

1. Public complaints regarding vehicle-related violations can either be texted, called in through a 24-hour hotline number, or filed through a data card available in business establishments or offices along the streets.

Example, for text messages:

BUGA (space) PLATE NUMBER (space) VEHICLE TYPE (space) COMPLAINT (then send to 007)

2. The Hotline Buga Operator tallies/collates the registered number of violators from text, phone calls and data cards in a format such as the matrix below:

PLATE NUMBER	VEHICLE TYPE/COLOR	LOCATION/TIME SIGHTED	COMPLAIN

3. For tricycle violators, TagBalay Foundation forwards the complaints to the Core Team and City Traffic Management which notifies the TODA involved. The TODA then discusses necessary action and/or remedial measures.

For Tricycle and other vehicle types, TagBalay Foundation collates reports and turns these over to the Core Team that then coordinates with the Land Transportation Office-Management Information Division (LTO-MID) or the Clean Air Management Board (CAMB).

4. With the complaints and collated reports, LTO-MID finds the names and addresses of the owners of the reported vehicles and then sends them individual summons through the LTO- Law Enforcement Service (LTO-LES).

As of June 2005, some suggestions were brought up to improve the mechanisms:

- Identify the exact amount of penalty to violators and inform the public about it.
- Violators will have a “polluter” sticker” to signify that the vehicle is unsafe and must be repaired before it can operate again. Another suggestion for the sticker to indicated “Caught in the act of contributing to air pollution!”
- A certificate of recognition or reward will be given to the TODAs that did not have any complaints filed against their members for the whole year. Recognition will also be given to the groups and individuals who contributed a lot to the success and implementation of the PPC CAP.

On May 30, 2005, TagBalay Foundation, Inc., with the support from the US-AEP, in coordination with the City Government of Puerto Princesa, formally launched Hotline Bantay Buga. The launching included a press conference, motorcade, and a launching program.

The press conference was held in Badjao Seafront Restaurant. Reporters and writers from Palawan Life, DYPR TV 7, DYER and DYPR Radio Stations and Palawan Mirror took part in the said activity with the Core Team.

Prior to the Launching Program at the Coliseum Park in the afternoon, a motorcade was held around the poblacion, which was participated in by members of the core team, motor dealer companies, Tricycle Operators-Drivers Association’s members and officers, TagBalay volunteers and staff and other civic organizations. From the Coliseum Park, the motorcade took its route to the national highway turning to Malvar St.-Roxas St.-Rizal Avenue-Junction I, back to City Coliseum park.

The formal launch was conducted with a program at the Coliseum Park right after the motorcade. The Launching Program was as follows:

NN

12:00 Lunch (Badjao Seafront Restaurant)  
Interview with tri-media

PM

4:00 Motorcade

5:00 Program at the Park

Environmental Prayer

National Anthem

Ms. Karen Custodio, CAP PAC Technical Assistant

Environmental Presentation

Teatro Palawano

Opening Remarks

Ms. Alefrina Villarez, Member-PPC CAP Core Team

Intermission – Song Number “Bathala”

Composed and Sung by Mr. Edilberto Magpayo

Inspirational Message

Mayor Edward S. Hagedorn, City Mayor

(Acknowledgement of Different Participating Groups)

Intermission Number – Tula

Officer of TODA Federation

Updates on PPC CAP Accomplishments for the past 1 year

Mr. Jonathan Magay, Member- PPC CAP Core Team

LAUNCHING – The Hotline Bantay Buga

The Mechanism

Intermission – Song Number

Palawan Conservation Corps' Volunteers

Message

Ms. Ninette Ramirez, Environmental Specialist- US-AEP

Declaration of Support to PPC CAP Hotline Bantay Buga

Mr. Efnie Lusoc, Pres. FTODA

(Acknowledgement of Different Participating Groups)

Intermission – Song Number (Rap)

Noel Tugo and Company –Gasmick Brotherhood

Closing Remarks

Mr. Wilfredo S. Ong, OIC TagBalay Foundation, Inc.

### Speakers' Bureau Trainers' Training

The Speakers' Bureau Trainers' Training held last April 4, 2005 at the TagBalay Training Center was participated by twenty six (26) youth leaders from different schools/organizations and ten (10) TagBalay youth volunteers. Of these, six (6) were selected to be members of the PPC CAP's Speakers' Bureau, a group of students who will become partners of TagBalay and PPC Core Team on the information dissemination through radio interviews, TV appearances, workshops, and forums. They will still undergo a more intensive training on how to be an effective speaker and facilitator for the Clean Air Program.

The program of activities is as follows:

<b>AM</b>		
7:00 – 8:00		Registration
8:00 – 8:15		Opening Program
8:15 – 8:30		Expectation Check
8:30 – 9:30		“Introduction of Ecology”
9:30 – 9:45		Snacks
9:45 – 10:45		“Air Pollution”
10:45 – 12:00		“The Clean Air Program”
12:00		Lunch
<b>PM</b>		
1:00 – 1:15		Ice Breaker
1:15 – 3:15		“Popular Education”
3:15 – 3:30		Snacks
3:30 – 5:30		Workshop
6:00 – 6:30		Selection of Top Six Members for the Speakers' Bureau
6:30		Closing Program

### Science Teachers' Seminar Workshop

The Science Teachers' Seminar Workshop entitled “ AIR TIME Seminar Workshop” (Alliance of Involved and Responsible Teachers Integrating Manual for Environmental Education) was held on May 31-June 1, 2005 at the Conference Hall of the City of Coliseum. The objective of this seminar workshop was to facilitate the inclusion of air management issues consolidated in one module, into the science curriculum of elementary (5<sup>th</sup> and 6<sup>th</sup> level) and high school (all levels). The workshop served as a venue to discuss issues on air pollution, health effects, air pollution management, and the PPC Cap activities and components.

The workshop schedule was as follows:

## Day 1 – May 31, 2005

## AM

8:00 – 8:30	Registration
8:30 – 9:30	Opening Program Invocation National Anthem Opening Remarks Presentation of TBF Staff and Volunteers Inspirational Message Presentation of Participants Introduction of TagBalay Foundation, Inc.

9:30 – 10:15	Commissioning Expectations Check
10:15 – 10:45	Snack/Ice Breakers
10:45 – 11:45	Session 1: “Ecology: Interconnectedness of all things”
11:45 – 12:00	Open Forum
12:00 – 1:30	Lunch Break

## PM

1:30 – 3:00	Session 2: “Air Pollution: Causes and health effects”
3:00 – 3:30	Open Forum
3:30 – 3:45	Snack/Ice breakers
3:45 – 4:45	Session 3: “The Clean Air Act of 1999”
4:45 – 5:00	Open Forum

## Day 2 – June 1, 2005

## AM

7:30 – 8:30	Registration/Attendance
8:00 – 8:15	Invocation/National Anthem
8:15 – 8:30	Recap
8:30 – 9:30	Session 4: “The Clean Air Program of Puerto Princesa City”
9:30 – 10:00	Open Forum
10:00 – 10:30	Snack/Ice Breakers
10:30 – 11:00	Presentation and Discussion on the Proposed Module Content
11:00 – 12:00	Workshop
12:00 – 1:00	Lunch Break

## PM

1:00 – 2:00	Workshop	
2:00 – 4:00	Group Discussion Snacks	
4:00 – 5:00	Closing Program Invocation National Anthem Environmental Presentation	Awarding of Certificates Ceremonial Turn Over of the Module to City DepEd Message

Note: Parts of this section were drawn from the Materials Development Guide of the Program for Appropriate Technology in Health or PATH. PATH is a private, nonprofit, international organization dedicated to improving the safety, availability, and acceptance of health products and technologies worldwide. PATH focuses on developing new technologies and improving existing ones by adapting them to the cultures in which they are used. It encourages the sharing of the materials such as those included here.