* * * Piped Supplies for Small Communities (PSSC) Project * * *

SOME NOTES ON PRE-TESTING MANUALS AND GUIDELINES
Mary Boesveld, November 1990

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1. What is pre-testing ?

Pre-testing, within the context of preparing manuals and guidelines, means : testing communication materials before they are printed and distributed. By showing the materials to the audience they are meant for, and discussing with them the contents, we find out if they are understood and liked. We also find out if the message or idea is conveyed in the way it was intended.

Pre-testing may have to be done several times. If a manual has been tested, and there have been suggestions from the audience to make changes, the new version has to be tested as well. Each new version has to be tested, until we are sure that the audience understands and likes it.

Pre-testing is a kind of research. In general, it should be following the rules which apply to any proper social research. The most important of these rules are :

* the objectives of the pre-testing are precisely stated: what exactly do we want to know ?

* the respondents (the persons who will be interviewed) are systematically selected;

* the contents and the phrasing of the questions to be asked in the interviews, and the order in which they are asked, are carefully defined;

* observations to be made alongside the interviews are specified;

* the recording, summarizing and analysis of the findings are done in a structured way;

* interviewers and observers are trained how to investigate, to ensure sufficient and unbiased results.

Although these rules have to be followed in general to make the results of the pre-testing as valid and reliable as possible, <u>the aim is definitely not to conduct a full-fledged, academic research.</u>
Pre-testing of manuals and other communication materials is always done within the framework of a project or programme, to improve the development of the materials. It should be set up with the requirements of the project in mind, and the practical time- and money limits faced by most projects have to be taken into account.

2. Why is pre-testing necessary ?

Communication materials are most often developed by urban, educated, modern people, who are accustomed to use written and illustrated materials in their daily live. Communication materials which are developed for projects, however, are meant mostly for comparatively poor, rural, less well educated or even illiterate people, who have much less exposure to posters, books, manuals, etc.

This situation creates a <u>communication gap</u> : development workers and villagers or urban slum dwellers may see things differently. The ideas they have about themselves, about society, and about the world may be very different, based on differences in life-style, tradition and education. They may react in very different ways on the ideas and pictures presented in the manuals.
Also, villagers may have information on their traditions and on their use of resources which urban development workers do not have, but which may be crucial in determining the success of a development activity. This information should be included in communication materials, when and where it is appropriate.

Throughout the world there are many examples of information materials like manuals, posters etc., which were interpreted wrongly or not understood at all by the people they were meant to reach. Not only the money that has been spent on these materials has been wasted, also the people did not get the information they needed.

Pre-testing will help to prevent expensive mistakes. It is cost-effective : one, or even several, tests will cost less then 1000 copies of a useless manual, or, worse even, the failure of a development activity.
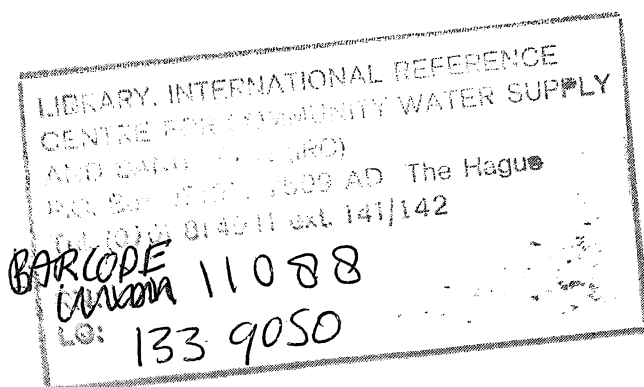
3. Steps in pre-testing

Brief outline of steps in pre-testing

*   Identifying the interviewers
*   Defining the questions
*   Deciding on interview methods
*   Determining recording methods
*   Identifying an appropriate sample of respondents
*   Conducting the interviews
*   Summarizing and analyzing the findings

Here we presume that the materials (manuals) which have to be pre-tested are ready in draft form, with clearly stated objectives and a well-defined target group. *)
There are many ways to pre-test communication materials. There is, however, a decision-making sequence which generally has to be followed in preparing and conducting any fieldtest, including the summarizing and the analysis of the findings. The sequence is made up of seven steps, which are outlined below.

*)   For a complete overview of steps in preparation and productions of manuals, see "Ideas On How To Develop A Manual", in which all steps preceding the pre-testing are outlined.

STEP ONE :   IDENTIFYING THE INTERVIEWERS

In principle, anybody who is trained can carry out a pre-test. There are, however, some advantages and disadvantages for the different categories of people who normally would do this job. They need to be discussed here, because they may have an effect on the way the pre-testing is conducted and on the way the findings are analyzed. In recognizing the disadvantages we can try to avoid them as much as possible.

Researchers, in particular social scientists, are in many instances well qualified to pre-test. They know information gathering and information processing techniques. They also have theoretical knowledge about people's values and behaviour, which they can use in designing and executing the pre-testing.
A disadvantage may be, that researchers are sometimes quite academic and removed from the reality of project problems. They may want to make the pre-test into a thorough academic exercise which takes a long time to design and to carry out. Also, they may not have been involved in planning and developing the materials to be tested, and therefore they may not be familiar with the purpose and the context in which it will be used.

To overcome these difficulties, and to make good use of the skills of a researcher, a close co-operation between the planners and developers of the materials and the researcher will have to be established. The researcher has to understand that the pre-testing is done to facilitate and support the preparation and intended use of communication materials, within the context of a development project. This practical aim should be reflected in the design and the execution of the pre-testing.

Planners and implementers of development projects can be good pre-testers. They know the subject very well, they know how the materials should be used, and the intended effect. Therefore, they can formulate appropriate questions, and interpret the findings in a way directly benefitting the project.
However, in some cases project staff may feel so closely connected with their project that they are not able to look at it objectively and from the point of view of the villagers. In pre-testing this is a great disadvantage, because they may base, unknowingly, the formulation of questions and the interpretation of the answers on their own opinions and feelings.
It is very important that in preparing the test this issue is raised and the dangers of imposing the opinions of the project staff on those of the community is thoroughly discussed.

<u>Artists and professional writers</u> have, if possible, to be involved in pre-testing, because they can then learn directly from the audience how their work is perceived. If they are open for feedback and suggestions from the audience, they may considerably enhance their skills in designing useful and attractive communication materials.

A disadvantage of the participation of artists in pre-testing is, that they often are quite defensive about their work. They may view their products primarily as works of art rather than as tools in communication. For this reason, they may be reluctant to listen to villagers' opinion of their products. They may feel that it is the villagers' fault if they do not understand the information, and not due to any shortcoming in the materials they produced.

A way to overcome this difficulty is to give the artists a very clear idea of the purpose of the material, on how it will be used and what are the intended effects. If they are interested in the communicative aspects of their work, they may even become skilled testers of their own materials.

Although <u>men and women</u> can be equally skillful in interviewing for pre-testing, the sex of the interviewer is not wholly irrelevant. In many countries, particularly in rural areas, it is not considered proper for a man to visit a woman in her house or her yard and to speak to her when she is alone. Likewise, a woman alone may not be able to visit a man.
Another problem occurs where women are brought up to be very quiet and modest in the presence of men. They will feel shy to present their ideas and opinions freely when they are interviewed by men.

A good solution would be for a man and a woman interviewer to visit the respondents together. If this is not possible, it is advisable to have at least a woman interviewing female respondents because in many cases she will get better results then a man. In group interviews the interviewer should take into account a possible reluctance of women to speak up in the presence of men. Sometimes it may be necessary to hold separate group interviews with women and men.

In some projects <u>extension workers, teachers, or village leaders</u> have assisted in interviewing for pre-testing in the communities in which they live and work. Experience has shown that in most cases this is not a good idea. Even with a good training these people may easily get biased and invalid results. The main reason is, that they are authorities in their communities, or at least are regarded as such. In many countries common people will not freely express their own views in front of an authority.
Another disadvantage is that many extension workers and

teachers will carry their teaching habits into the interview. They will have a tendency towards testing the audience, rather than the materials. They will ask questions like "Do you understand this ?", suggesting that there are any right or wrong answers.

This is not to say that extension workers, teachers and village leaders can not contribute in an important way to the success of a pre-testing. They know the community very well, and because of their position and prestige they can facilitate the proceedings considerably.
Also, it should be made clear to them, and to all community members that everybody's opinions are valued and their views and suggestions taken seriously. It is the defined purpose of a pre-testing to get those opinions and suggestions, to use them to improve communication materials.

STEP TWO :   DEFINING THE QUESTIONS

1. What questions to ask ?

Any list of questions for pre-testing a manual, or other
communication materials, will be based on the following
general criteria :

*   **visual impact** : is the message visually attractive ?

*   **comprehension** : can the audience understand the words,
        contents, illustrations ?

*   **social and cultural acceptability** : will the message
        and form of presentation in any way create difficulties
        or offend the audience ? Does the message take
        seriously all existing knowledge and experience of the
        audience ?

*   **economic acceptability** : is the message economically
        viable for the audience ?

*   **technical acceptability** : is the message deemed
        technically feasible by the audience, given their
        available labour, cash, supplies, and knowledge ?

*   **general usefulness** : is the target group able to work
        with the manual in the intended way ?

For each of the manuals which have to be tested, we can use
this list as a guide to determine what we want to find out.

To give ourselves a clear idea of the **specific questions** we
want to ask, we need to go back to the objectives of the
manual as they were defined at the time it was designed :

*   What exactly is the topic of the manual, or are there
        several topics ?

*   Who will use the manual, and how is the audinece
        supposed to use the manual ?

*   What kind of effect is the manual expected to have on
        the audience : is it supposed to inform people,
        instruct them in a skill, motivate them, or anything
        else ?

*   Has any previous knowledge and experience of the
        audience on the topic of the manual been taken into
        account ?

Most manuals will be designed primarily for use by extension
workers. He or she will explain the message to other people,
e.g. villagers. In that case questions will have to be asked
from the extension workers as well as from the villagers.
Both groups have to understand and appreciate the topic and
the general contents of the manual, and assess its
usefulness.

2. How to phrase questions ?

Not only the content of the questions is important, also the way they are phrased may influence to a large extend the answers.

There are two main types of questions that are commonly asked in interviews : open-ended questions, and closed, or leading questions.

Open-ended questions are asked to get people to express what they think, without providing a lead or a clue as to what the answer might be.
Examples of open-ended questions are :
- What do you see in this picture ?
- How do you think a public standpost should be kept in good working order ?
- What could you add to the issues discussed in this manual on the maintenance of public standposts ?

Closed, or leading questions give, sometimes unintentionally, clues for answers. It is very common when asking for information to pose questions like "Do you like (or understand) this picture ?", "Do you see here a village ?" or "Do you think this is a good type of toilet ?"
The danger in asking such questions, is that the respondent will give an "appropriate" answer. She understands that she has to appreciate the picture, or has to see a village, and she will answer accordingly; she might give an opinion on the type of toilet, based on what she thinks is the opinion of the interviewer. The respondent has been <u>led</u> to give a certain answer, which might not reflect her own ideas.
This way of asking questions should be avoided. Most of the answers might not be valid, which will certainly lead to a faulty interpretation of the findings.

In some interviews respondents are asked to make a choice between two or more answers to one question. For example : "When you have a sick child, do you go to the traditional healer, to the nurse at the village health center, or to the doctor at the hospital ?" Sometimes a long list of possible answers is presented to the respondent, for instance a list of food items, to point out those which are commonly used. There is usually no opportunity for the respondent to introduce things which are not on the list, or name any choice which is not offered by the interviewer.

These types of closed questions will not be used in pre-testing. It is important that in pre-testing communication materials people are not inhibited in expressing freely their ideas and feelings. Questions should be phrased in such ways that they will be stimulated to do so.

3. Personal data of the respondents

Besides the opinions and suggestions of the respondents on
the manuals or other communation materials we are testing,
we need some personal data of the respondents. These data
will allow us to analyse their answers within a relevant
context.
Ideas of young people may differ considerable from those of
older people. Women and men may have different opinions.
Village leaders may make certain suggestions which are based
on their position. These differences can influence the
findings of the pre-testing, and we want to be aware of that
influence.

It is therefore important to record for every interview the
most relevant personal data of the respondent. These are :
* sex
* age
* level of education, or literacy/illiteracy
* position or occupation.

For pre-testing it is not always necessary to ask specific
questions on age, education and occupation. Most of the time
good estimates, based on observation, are sufficient.

STEP THREE : DECIDING ON INTERVIEW METHODS

There are basically two types of interviews : structured and unstructured.

In a **structured interview** a questionnaire is prepared with a number of fixed questions in a fixed order, and possible answers are worked out in advance. The interviewer reads the questions and codes the answers.
An example from such a questionnaire may be :

- Does your household have its own pit-latrine ?
  yes ......   no ......

- If yes : With how many people do you use it ?
  up to 5 persons ......   more than 5 persons ......

- If no : Did you ever consider to build a pit-latrine
  for your household ?
  no, never .....   yes, I sometimes think about it ....
  I don't know .....

A structured interview has the advantage that it is easy to record. The findings are easy to summarize and it is usually possible to make a statistical analysis.
A disadvantage is that it is not possible to go more deeply into opinions, ideas and feelings of the respondents. All questions are closed. There is usually no opportunity to discuss things or elaborate on a topic.

In pre-testing we particularly want to hear those opinions and ideas. For that purpose it is better to use an **unstructured interview**. In this type of interview the interviewer does not use a questionnaire, but only a checklist with open-ended questions. The interviewer can follow-up each question by asking further details, based on the answer the respondent gave. The checklist is only used as a guide, to remind the interviewer of which questions should be asked, and of the order in which they will be asked.
The following conversation could be an example from an unstructured interview :

- **Question 1** : What do you see in this picture ?

- **Answer** : I think it could be a village. But the houses look very funny.

- **Probing question** : Why do you think they look funny ?

- **Answer** : The roofs look strange, and there are so many windows. Our houses here usually have only one window.

- **Probing question** : Yes. What do you think is this (points to a public standpost on the picture) ?

- etc.

In this example only the first question ("What do you see in this picture ?") has been included in the checklist. The second question is a reaction on the answer given, to ask further details. The third question goes deeper into certain relevant features of the picture. This technique of asking questions is called <u>probing</u>.

Unstructured interviews which include probing are particularly well suited for pre-testing manuals and other communication materials. They allow the respondents a maximum of free expression of opinions and feelings. However, they are more difficult to record than structured interviews, and it is more complicated to summarize and analyze the findings. Unstructured interviews generally require a skilled interviewer if they are to produce useful results.

All interviews, particularly unstructured interviews should be accompanied by some **observation**. Important points for observation are :

1.   <u>the attitude of the respondent</u>
        All people disclose feelings of pleasure, disgust, shyness, etc. with movements of their hands, head or body. If a respondent answers "Yes, that's fine", but at the same time shows disgust, we know that we have to do some probing to find out what he really thinks.

2.   <u>The environment in which the interview takes place</u>
        should be observed. What is the respondent doing while she is interviewed ? Does she listen and answers attentively, or is she continuously distracted by her children, by neighbours, etc. What other people are present ? How do they behave ?

3.   <u>age, position, level of literacy</u>
        When it is not necessary to know exactly the age of respondents, or their position or income, as is the case for most pre-testing, we can make good estimates of these things through observation. When pre-testing manuals or other written materials, there is no necessity to ask questions about literacy or level of education when this can easily be observed.

It is important to record all observations made during an interview. They will complement the answers given by the respondent, and are valuable when we analyse the findings.

STEP FOUR :   DETERMINING RECORDING METHODS

Having decided on <u>unstructured interviews and open-ended questions for pre-testing</u>, it is not possible to use the fixed, strictly defined ways of recording that structured interviews allow. However, certain arrangements for systematic recording can be made to facilitate summarizing and analysing the answers.

Here some suggestions are given :

*   Use a fresh sheet of notepaper for each interview. Mark each interview clearly with its own identifying number. Number all pages of each particular interview (see the example on the next page). Keep each interview separate from the others.

*   Record for each interview the place where it is held, the date, the time, and the name or initials of the interviewer (see the example on the next page).

*   Leave a small margin on the left side of the notepaper, to indicate the number of the question for which a particular answer is given.
    Leave a larger margin on the right side of the note-paper, to write any observations which are made during the interview, or special remarks (see the example on the next page).

*   Make notes of everything that is said in the interview, and of all observations. Record also your "probing" questions.

*   As much as possible take down the actual words, as they are spoken. Do not "translate" answers into your own words.

*   Watch the reactions and the attitudes of your respondents very carefully (without embarassing them). Try to observe the respondents attitude towards specific questions, and changes in his/her behaviour during the interview. Record everything you see.

*   Write down immediately the answers and observations. Do not rely on your memory.

*   Group interviews are more difficult to conduct and to record than individual interviews. Unless you are very experienced, do group interviews never alone, but always together with a partner. You can then take turns in asking questions and taking notes.

*   Make a rough sketch of the participants in the group interview, indicating their number, the way they are seated, and their sex. Take notes on who talks much, who speaks little, who is silent. Try to draw a communication network (see the example, next page).

EXAMPLES (Step four)

1. Interview notes

Int. no.   : 1   page 1
Place   : Kasungu, yard 12
Date   : 7.12.1990
Time   : 11.30   Interviewer : F.K.

Q.1   (What do you see on this picture ?)   woman
         I see houses, and a tap, with some   age ± 40
         people.   3 children
Q   Could this be the tap in your   and neighb.
         community ?   present
         No, this tap is broken. We do not
         have a broken tap.

...   etc. ....   illiterate

- -

2. Recording of group interview

Int. no.   : 6 (Group)   page 1
Place   : Kasungu, Tap Committee, Tap 3
Date   : 9.12.1990   Interviewers:
Time   : 15.00 h   J.M. & A.C.

                                              Present 7
         Network :   3 m, 4

Q.1   (This manual is about your work as
      a Tap Committee. Does it show any
      situation which is familiar to you ?)

         ..... etc.   A & C : silent
                                             D : dominating

STEP FIVE : IDENTIFYING AN APPROPRIATE SAMPLE OF RESPONDENTS

To get good and sufficient information about the impact, effectiveness and acceptability of communication materials it is not necessary to interview very many people. By <u>sampling, or systematically selecting certain people for interviewing</u>, it is possible to get a good and reliable idea of general opinions and feelings of the users about the materials.

There are many different methods of sampling which are used in academic research. For the purpose of pre-testing materials for development projects it is usually not necessary to go deeply into details of these methods. Here, some general rules are given which, when considered carefully and adapted in an appropriate way to the specific materials to be tested, will help to select the right group of respondents.

* For pre-testing usually a kind of **purposive sampling** is carried out. This means that for the purpose of testing a particular manual or poster, respondents are choosen among the target audience and other users, in the area where it is to be used.
  Materials which are going to be used within the framework of a development project, should be tested with the people who are involved in that project. Manuals which are designed primarily for extension workers, will have to be tested with them, and also with the villagers with whom the extension workers will discuss the contents of the manuals.

  Materials which are designed for use by specific groups, like schoolchildren, or mothers, or for an organisation or a committee, should be tested with those groups, and with ordinary community members who may be parents of schoolchildren or future members of a committee.

  When pre-testing is carried out in a community, usually some influential people like the village headman and other leaders have to be included in the selection of respondents. Otherwise they may object against the interviewing in their area, and influence negatively the proceedings.

  Thus, for testing a manual about operation and maintenance of public taps which are built for a particular project, respondents may be selected among
  - extension workers in the project area;
  - community leaders or other influential people in the area;
  - members of Tap Committees;

\-   community members, women and men in equal numbers.

*   An important issue to consider is the **number of
        respondents to be included in the sample**. In pre-
        testing a simple manual or a poster it is usually right
        to start with a total number of 25 to 30 respondents.
        If the answers are consistent (i.e. most people
        interpret the pictures and the message in the same way)
        this number will give sufficient information to edit
        and redesign the manual or poster.
        If the answers are very different, it is necessary to
        ask more people, until there are enough similar
        reactions to show a <u>trend</u>. Sometimes it is clear after
        a few interviews THAT there is a problem with the
        material, but it is not clear WHY there is this
        problem. In that case it is necessary to go on with
        more interviews until we have a good idea of what we
        need to change and how to change it.

        Of course, the total number of respondents should
        <u>include in a balanced way all groups</u> from which they
        are selected. The required number in each group should
        be considered carefully. For example, for pre-testing
        the manual on operation and maintenance of public taps
        it was decided to interview :
        \-   5 extension workers;
        \-   5 Tap Committees;
        \-   3 village headmen;
        \-   10 community members (5 women and 5 men).
        With the Tap Committees, consisting of 6 or 7 members
        each, group interviews were held. The Tap Committees
        would be the main users of the manual, and it was
        considered important that particularly their opinion
        would be sufficiently represented.

*   Sometimes it may seem easier for the interviewers to
        choose as respondents mostly those people whom they
        already know well (and who probably might be already
        somewhat familiar with the messages in the materials to
        be tested). Or, there are so many community leaders to
        be interviewed that there is no time left to interview
        the required number of ordinary community members.
        In these cases the sample is biassed, and this will
        make the results of the pre-testing unreliable. People
        who are already familiar with the subject of a manual
        will react differently from people who have not thought
        about it before. Community leaders may have not the
        same ideas as ordinary women and men.
        **Bias in sampling always spoils the findings of the pre-
        testing**.

*   Bias in sampling can be avoided by making **a random selection of respondents**. When a decision has been made on the different groups which have to be interviewed, and on the required number of respondents from each group, the actual respondents can be choosen in a random way. For example, from a list of all Tap Committees in an area, every fifth Committee is choosen. In a village or ward, every third or every fifth house is visited. Another way to make a random choice is to write names (i.e. of extension workers) on pieces of paper which are folded and put in a bowl. The required number is then drawn.

STEP SIX :   CONDUCTING THE INTERVIEWS

Interviewing is not easy. The results of an interview depend
to a large extend on the attitude of the interviewer, who
must be friendly, polite, tactful, sensitive, patient, not
too timid or forceful, or too talkative.
If possible, interviewers should have some practical
training to become aware of their own attitudes, and to get
familiar with all kind of difficult situations which can
influence the interview.

Here some general rules for conducting good interviews are
given :

*   When approaching a respondent, exchange greetings and
     introduce yourself.

*   Explain the purpose of your visit, without emphasizing
     too much the importance of your assignment. Rather
     emphasize the importance of the opinions and ideas of
     the respondent for the improvement of the materials.

*   Indicate the approximate length of your visit, and ask
     the respondent if he or she can spend this time with
     you.

*   Ask permission to take notes, or to use a taperecorder.

*   Use the local language for interviewing and recording.
     If you can not speak the language well enough, you will
     need an interpreter, preferably somebody you know, who
     can translate the questions and answers in a reliable
     way.

*   Give the respondents enough time to look at the manual
     or the poster and to make comments. Be patient, do not
     rush through the questions and put pressure on the
     respondents to answer quickly. It is better to do a few
     interviews well, than to have many but unreliable
     results at the end of the day.

*   Let the respondents hold the manual and leaf through
     it, let them show it to others present, etc. Carry some
     extra copies for replacement of dirty ones.

*   In very difficult situations, like for example
     respondents who are drunk, or a hostile village leader,
     make a quick decision to end the visit and select
     another respondent, another house or even another
     community for interviewing.

*   If food and drink is offered within the limits of a normal short visit, it can be accepted. However, giving and accepting hospitality should not become a strain on respondents and interviewers. You should be able to say "no, thank you" gracefully, indicating other visits you still need to make that day.

*   After the interview thank the respondents for their co-operation and their useful information.

*   Some respondents might ask to see any results from the interview. You will create a lot of goodwill for the project if you can promise to send or bring them a revised copy of the manual or poster. In that case, take down the exact name and adress of the respondent, and make sure that the copy is send as soon as it has been produced.

In **pre-testing manuals with mainly written text**, or more written text than captions for illustrations only, it is necessary to send copies to the groups from which respondents will be selected some time before the interviews will take place. The people have to be informed of the purpose of the pre-testing and asked to read the manuals before your visit.
Of course this makes only sense for people who may be expected to be literate enough to read and understand the manuals. But even then you must take into account that some of them will not have read the material. In those cases the best approach is to allow enough time during the interview for the respondent to look through the manual and read certain parts which are important for the interview.

STEP SEVEN   :   SUMMARIZING AND ANALYZING THE FINDINGS

To summarize and analyse the findings of the pre-testing, all interviews have to be brought together in a systematic order. The easiest way to do this is to <u>summarize all answers for each question on a separate summary sheet</u>. This makes it possible to see general trends in the answers and to mark the main points most frequently mentioned (see example no. 1). If out of 23 respondents, 20 have made remarks on not understanding the chicken in a drawing, it is clear that these chicken should not be there.

<u>To find and interpret the trends</u>, it is necessary to go back to the criteria for pre-testing, which were used as a guide to what we wanted to find out :

*   <u>visual impact</u> : did the repondents like the material ?

*   <u>comprehension</u> : did the respondents understand the message, the illustrations ?

*   <u>social/cultural, economic and technical acceptability</u> : is the message acceptable to the respondents ?

*   <u>usefulness</u> : are the respondents able to use the material in the intended way ?

Answers to these general questions should be found in the opinions and ideas of the repondents, perhaps complemented with their suggestions on how to improve the manuals. It is important to reveal not only THAT something is wrong, or not understood, but also WHY it is not understood, or wrong.

A separate summary sheet should also be made to <u>summarize age, sex, education and position of the respondents</u>, and the places where the interviews were held. If possible, special observations and remarks could be included in this list (see example no. 2).
The answers of the respondents can then be analyzed in connection with their age, sex, level of education, and position. If only 4 out of 22 respondents have understood a certain part of the manual, and these 4 belong to a group of better educated people, that part of the manual has to be reviewed for simplicity and clarity.

As a general rule, <u>group interviews are counted as one interview, but the members of the group are indicated separately for age, sex, etc.</u> This is done to take into account possible differences in opinion among the members of the group. It is useful to indicate "group" next to the interview number.

For the presentation of the analyses **different kinds of tables** can be made (see example no. 3). It is advisable to make only those tables which give relevant information for the improvement of the materials which have been pre-tested. If a quick look at the interviews from three communities shows that the results are not very different, it is a waste of time to make separate tables for the three communities. In this case it is even much better to combine the results, because more answers will show clearer trends.

Where it is possible to make comparatively simple interpretations of information, such as general usufulness of a manual, or general comprehension of a drawing, **a tally method** for summarizing and presenting the answers can be used (see example no. 4).

Generally for pre-testing, the analysis of findings should not be done as an academic exercise, but with the objective of the pre-testing firmly in mind : which information can best contribute to the improvement of the materials.