

March 2012

Research, Monitoring, Evaluation and Using Results

IEC for the Municipal Water Supply, Sewerage and Sanitation Sector Plan (MW4SP)

Prepared by the



Asian Institute of Journalism and Communication

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and Sanitation Sector Plan (MW4SP)***

Prepared by the
Asian Institute of Journalism and Communication (AIJC)
for the MDGF 1919 Programme
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IEC for the MW4SP

The information, education, and communication (IEC) component of the MW4SP assists the DILG in achieving its objectives of increased access to and use of water services among families and communities in 36 waterless municipalities, use of localized customer service code by water service providers, and increase investment and resource allocation for water among LGUs, private sector partners, and donors. It designs communication methods and materials to facilitate achievement of the following **behavioral results** at the local level:

- Families and communities in waterless communities covered by the Program have increased access to and use water services through a clear understanding of every person's right to affordable, clean and safe water and of their responsibilities in water resource utilization,
- Water service providers in waterless communities use the localized customer service code in planning, managing, operating and maintaining water facilities,
- Local government units, private sector partners and donors increase investment and resource allocation for water in waterless communities.

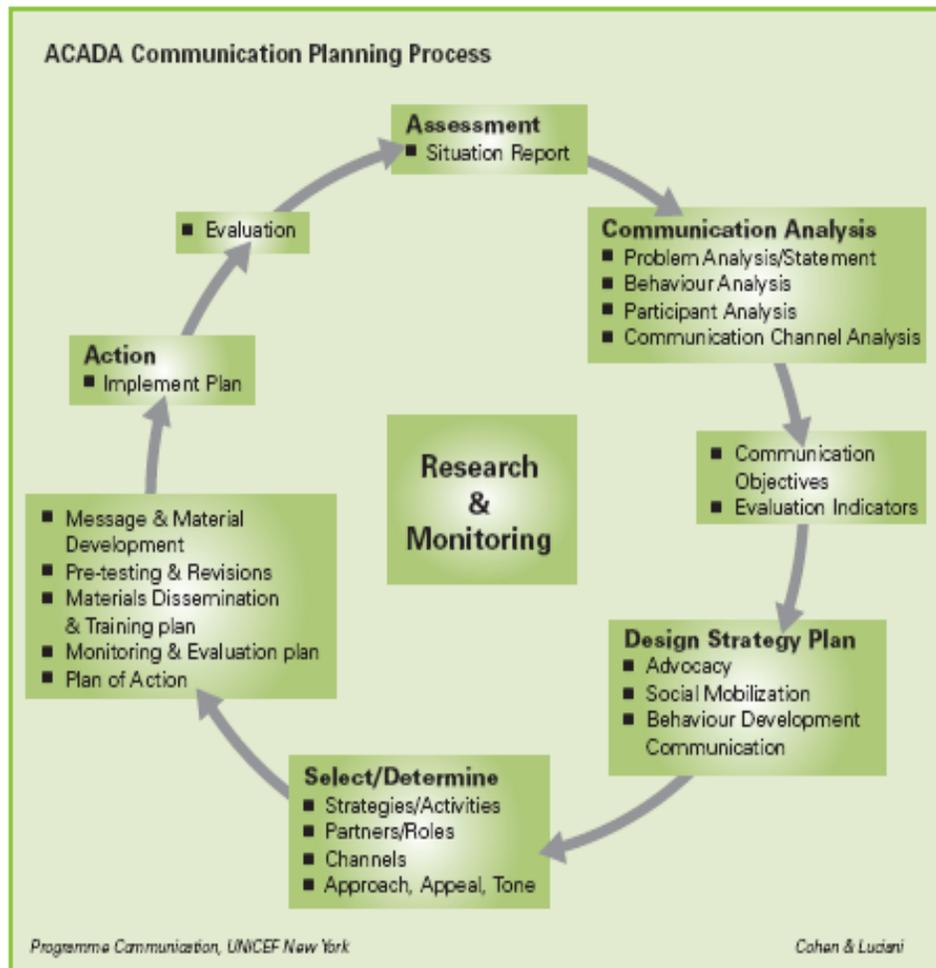
IEC refers to the strategy, methods, materials, and processes used to inform, educate, and communicate with stakeholders. The IEC intervention for the MW4SP subscribes to the Communication for Development (C4D) approach. The United Nations defines C4D as “the support of two-way communication systems that enable dialogue and allow communities to speak out, express their aspirations and concerns, and participate in the decisions that relate to their development” (UNGA Resolution 51/172). UNICEF describes it as “a systematic, planned, and evidence-based strategic process that

- a) is intrinsically linked to program elements,
- b) uses consultation and participation of children, families, communities, and networks,
- c) privileges local contexts, and
- d) relies on a mix of communication tools, channels, and approaches to promote positive and measurable behavior and social change.”

Defining Research, Monitoring and Evaluation

Monitoring and evaluation (M&E) are necessary to ensure that an activity or project is implemented as planned and is accomplishing its objectives and working toward the attainment of the set goal. The M&E of a C4D-oriented IEC intervention should further ensure that objectives and ultimate goal are attained through methods, materials, and processes that are: a) program-based, b) participatory, c) focused on the local context, and d) promote positive behavior and social change.

The Research, M & E (RM&E) framework below seeks to gather evidence and assess not only performance towards the goal but also the resulting action or behavior among the different participant groups. It subscribes to the ACADA Communication Planning and Implementation Model (AIJC, 2011).



A Framework for RM&E of a C4D-oriented IEC Intervention

Monitoring and evaluation complement each other, **with research an integral part of both**. The difference, simply put, is that monitoring is done to improve performance of the program or project, while evaluation is done to judge that performance. Nevertheless, an interface between monitoring and evaluation exists, as shown in the respective questions that have to be answered:

| Monitoring Questions | Evaluation Questions |
|--|--|
| 1. Are the project activities implemented according to plan? | 1. To what degree have the objectives been achieved? |
| 2. Who is benefiting from the program? | 2. Is the project cost-effective? |
| 3. Are the expected outputs and outcomes being produced by the activities? | 3. What impact have the activities made on the participants? |
| 4. What changes, if any, should be made to the activities? | 4. What decision should be made on the project? |

Research involves the gathering of needed data and information that will inform the formulation of communication objectives and indicators of success, strategies and message development.

Monitoring is the continuous gathering, interpretation, and analysis of data or information on strategies and activities to provide management and stakeholders with early indications of progress (or lack of progress) in the achievement of project objectives. Data and information from monitoring are used to make any needed adjustments in the communication plan.

Evaluation assesses the extent to which objectives of a communication intervention have been achieved and determines its impact on the problem or issue being addressed. Its purpose is to determine the value of the intervention, or the extent to which it is necessary, desirable, useful, important, or can serve a purpose or cause an effect.

The data and information produced by research, monitoring and evaluation are valuable in advocacy, social mobilization and behavior change communication. The findings and results should therefore be reported back to the various stakeholders.

Steps in Developing a Monitoring Plan

The IEC intervention needs to be monitored to: a) ensure that progress is made and performance is proceeding as planned within the time frame and resources set, and b) enable implementers to detect emerging or potential problems and to address these emerging problems suitably.

To enable implementers to monitor their activities efficiently, a monitoring plan should be developed. A monitoring plan is a guide for keeping track of the activities of a project. Developing the monitoring plan involves the following steps:

Step 1. Develop monitoring objectives.

What does your monitoring activity hope to accomplish?

Monitoring may be aimed at enabling planners or implementers to:

- Make decisions on what areas to sustain, enhance, improve, or discontinue
- Determine whether or not program or project remains relevant to development goals and objectives
- Determine whether or not appropriate groups are involved
- Determine whether or not objectives remain valid
- Identify, prevent or reduce, and solve gaps or problems
- Determine which IEC strategies work
- Measure cost efficiency, transparency, and effective management
- Ensure accountability, responsibility, and equity.

Step 2. Specify monitoring indicators.

What should you observe or measure that would indicate presence or progress of a target result?

Monitoring indicators are values that you observe or measure to indicate progress or presence of a target result. A monitoring indicator may be quantitative, indicating the amount or value of inputs, outputs, or resources. It may be qualitative, describing the quality of outcomes and processes involved.

By gathering data on your monitoring indicators, you are able to determine progress or absence of progress in an area that you have decided to monitor.

Step 3. Identify project activities to be monitored.

What area of the IEC intervention do you want to monitor? What are the activities in this area?

Progress or absence of progress in an IEC intervention can be determined by monitoring certain aspects of its implementation. Data and information can be gathered by monitoring the following areas:

- Planned activities – How are the activities specified in the plan being implemented?
- Development, production, and release or distribution of outputs – Are these activities efficiently done, while providing for participation and involvement, inputting of local context, and using complementary media?
- Reactions of participants – Do participants find the IEC methods, materials, and processes acceptable, relevant, and having content useful in solving a problem or changing behavior?

Step 4. Indicate expected outputs for each activity and expected date of accomplishment.

What will be produced in this activity and when?

Outputs are the results of activities of the project or intervention. Outputs may be material products and artifacts, systems, processes, or changes in people’s behavior or skill level.

Step 5. Consolidate all activities to be monitored in a matrix.

A matrix is a tool for visualizing the components of your plan. It will enable you to review it for completeness and logical relationships of the items. An example of a monitoring plan matrix is given below.

Monitoring Plan template for IEC Component

Monitoring Objective: _____

Monitoring Indicator: _____

| ACTIVITY TO BE MONITORED | ACTIVITY OUTPUT | DATE OF ACTIVITY IMPLEMENTATION | DATA/ INFORMATION TO BE GATHERED | DATA/INFORMATION GATHERING TOOLS | PERSONS/UNITS RESPONSIBLE | MONITORING DATE | BUDGET |
|--------------------------|-----------------|---------------------------------|----------------------------------|----------------------------------|---------------------------|-----------------|--------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Step 6. Add dates of activity implementation.

When are these activities scheduled to be done?

Schedule monitoring activities, keeping in mind the type of data or information to be gathered and the availability of their sources.

Step 7. Identify important data to be gathered.

What statistics, information, or facts on the indicators should you gather?

You may gather quantitative data or qualitative information on your chosen indicators. Both must be analyzed and used to describe your indicators.

Step 8. Decide on a date for data gathering.

When are you going to gather the data?

Note this in your matrix.

Step 9. Prepare monitoring methodologies and instruments.

How will you gather the data?

Monitoring tools and instruments are your devices for gathering data and information on the indicator. Good monitoring tools are user-friendly and self-instructing, use simple language, and are easy to understand. At the same time, they are comprehensive, improvement-oriented, and independent of evaluator bias. They are also time-saving, economical, and easy to analyze.

Monitoring tools and instruments you may use in monitoring the IEC intervention are:

- Questionnaire – a list of structured or unstructured questions to be answered by a number of people.
- Checklist – a prepared list of items that are to be observed at the project site. It consists of monitoring indicators earlier identified and developed in order to determine the status of the project.
- Program documents – project records and documents to be analyzed through random selection of content and statistical techniques for making general assertions.
- Observation schedules – matrix for random recording of data collected during field observation. Data collected in observation schedules must be checked with other records, such as journals, maps, and charts.
- Interview guide – a list of key questions for conducting a structured or unstructured interview. In an unstructured interview, sources may describe topics in their own words and make suggestions and comments.

- Diary/Journal – a record of events and insights to be made either by a lead implementer or stakeholder. It may be either a continuing or periodically prepared account of the project.

Step 10. Prepare the budget for monitoring.

What human, physical, and financial resources are needed in monitoring?

List all the resources and the amounts you expect to use in the monitoring activity. Cost each item and come up with a realistic budget.

Step 11. Flesh out your matrix into a monitoring plan.

The monitoring plan is a document that describes your whole monitoring activity. Develop your monitoring plan from the matrix you have constructed. Describe each component of your matrix and add details to tasks listed there, so that monitors can be guided in implementing it. A monitoring plan contains a concise discussion of the following:

- Monitoring objectives
- Indicators
- Project activities to be monitored
- Activity implementation period
- Expected activity outputs
- Data/Information to be gathered
- Data gathering tools
- Responsibility center/ Monitoring implementers
- Monitoring dates
- Budget

Steps in Designing an Evaluation

Evaluation aims to assess the extent to which objectives of an intervention have been achieved and to determine its impact on the issue. Its purpose is to determine the value of the intervention, or the extent to which it is necessary, desirable, useful, important, or can serve a purpose or cause an effect.

Evaluation is done at two points during a project or activity:

- midway through a project to fill in gaps. Its objective is to assess the current status of the project in order to introduce measures to improve performance, and
- at the end of the project to determine the extent to which the intervention succeeded in terms of impact, sustainability of results, and contribution to capacity development. It is done to determine the impact of the intervention on an issue and to extract valuable lessons and practices from it.

To attain its objectives, an evaluation activity has to be planned. An evaluation plan is a structured design to systematically collect data and information on a program or project to assess the extent to which objectives were achieved or to determine the impact of the intervention on the problem being addressed

Formulating the evaluation plan follows establishment of the desired results of an intervention. Here, the planner: a) maps out how data or information on the performance of the program or project are to be collected, analyzed, and assessed, and b) provides a guide on how to demonstrate progress toward achieving the expected results.

Designing the evaluation and developing an evaluation plan involves the following steps:

Step 1. Build your hierarchy of targeted results.

This is the chain or ladder of objectives of the program or project, arranged from the highest to the lowest. The hierarchy of objectives can be inferred from the project's stated goal/objectives and implementation plan. Review the project's proposal or inception report and arrange the objectives into a logical hierarchy from the highest to the lowest target results consisting of the project's ultimate outcome, intermediate outcome, immediate outcome, outputs, and inputs.

Step 2. Determine for whom you are conducting the evaluation.

Who will be participating in the evaluation? What performance information do you need about them? Participants in an evaluation may be implementers, partners, or different groups of stakeholders.

Step 3. Decide what to evaluate.

Answer the question, “What do we want to know?”

There are different types of evaluation depending on what you want to evaluate and why you are conducting it. Knowing what you want to know will help you determine the type of evaluation you need to do and, consequently, the data or information you need to gather and the methods for gathering these. The types of evaluation are:

- Formative evaluation – assesses the strengths and weaknesses of strategies, channels, approaches, messages, and materials and identifies changes and revisions to the plan.
- Process evaluation – examines procedures and tasks, determines how well strategies are conducted, and which ones work and which do not.
- Outcome evaluation – assesses results of the intervention to identify their immediate effects on specific audiences.
- Impact evaluation – focuses on the long-term results and determines the extent to which the intervention contributed to the achievement of the planned objectives.

Step 4. Formulate key evaluation questions.

These are questions related to what is being evaluated. The data and information you gather should enable you to answer these key questions.

Example:

- What is the effect of the barangay feeding program on the health of preschool children in the community?

Step 5. Select performance indicators.

A performance indicator is a specific and objectively verifiable or observable measure of change brought about by an activity. Performance indicators are the focal point of any evaluation plan. For instance, increase in test scores in mathematics among kindergarten pupils after their exposure to a new mathematics book may be used as a performance indicator for that book.

Step 6. Establish the baseline data.

Baseline data are the starting point from which future performance is monitored. They provide useful pre-project information and data against which subsequent data on performance can be compared.

Step 7. Set performance targets.

These refer to the desired change in level of performance deemed achievable by implementing the project.

Step 8. Identify data sources.

These are the individuals or groups that can provide the data or information you need. Data may be primary or secondary. Primary data are gathered directly by the organization from the field through surveys, interviews, or direct observation; secondary data are data that have been gathered by other organizations for other purposes.

Step 9. Choose data collection methods.

Primary data-gathering methods fall under three general types:

- Formal – well-structured methods that collect in-depth information such as large-scale surveys and case studies.
- Informal – done through informal observations and conversations with target respondents and key informants, such as participant observation and other ethnographic techniques to gather qualitative information and impressions. Games and role play also may be used to gather data.
- Rapid appraisal – quick methods of gathering opinions and feedback from stakeholders or beneficiaries such as focus group discussions, key informant interviews, etc.

Step 10. Identify persons responsible.

Who should evaluate a program, project, or activity? Evaluators should be people who understand the intervention but are not its implementers. Experts on the activity area who have had no part in conceptualizing or implementing the intervention and are not likely to be biased for or against it make the best evaluators.

Persons or units assigned to evaluation tasks should understand their responsibilities thoroughly and should be given the authority and the resources to do their tasks effectively. The who's and when's should be very clear in assigning the following critical tasks:

- Data collection
- Data analysis and interpretation
- Presentation of results to stakeholders
- Decision making based on performance information

Step 11. Create your evaluation matrix or logical framework.

The Logical Framework or LogFrame approach can help you identify the elements and arrange them so that you logically respond to your desired results in all levels. Filling out your logframe matrix will help you visualize how responding to objectives and corresponding elements at one level will enable you to respond to the higher objectives until you get to the ultimate outcome, which is essentially the goal of your intervention.

Evaluation Plan template

| HIERARCHY OF TARGET RESULTS | PERFORMANCE INDICATOR | OPERATIONAL DEFINITION | BASELINE DATA | PERFORMANCE TARGET | DATA SOURCE/S | DATA COLLECTION METHOD | PERSON/S RESPONSIBLE |
|-----------------------------|-----------------------|------------------------|---------------|--------------------|---------------|------------------------|----------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Ultimate Outcome | | | | | | | |
| Intermediate Outcome | | | | | | | |
| Immediate Outcome | | | | | | | |
| Outputs | | | | | | | |
| Inputs | | | | | | | |

The elements in a logframe for a project are:

1. Hierarchy of targeted results – the chain or ladder of objectives of the program or project, arranged from the highest to the lowest, thus:
 - Ultimate outcome – the highest target result expected of an intervention, in essence the attainment of the program’s or project’s objectives
 - Intermediate outcome – results that are broader in scope or that cause a more sustained change in the performance – behavior, capacity, or accomplishments of participants
 - Immediate outcome – new activities, behavior, accomplishments, products, and other direct results of using the Outputs and Inputs
 - Outputs – materials, methods, tools, techniques, procedures produced and used to achieve program or project objectives
 - Inputs – the material, human, temporal, and other resources and processes that were used in producing program or project outputs
2. Performance indicators – quantitative or qualitative measures of the results of an intervention. A performance indicator is what you watch out for to show that there is a result and its extent.
3. Operational definition – describes further the performance indicator. It may provide criteria or conditions to be used in gathering data on a performance indicator.
4. Baseline data – data or information on the performance indicator gathered before the start of the program or project. It represents a take-off point from which progress – or lack of progress – can be measured.
5. Performance target – desired change in the performance indicator as a result of the program or project. It should indicate the direction and extent of the change after a given period.

6. Data sources – the individuals, groups, or organizations that can provide the data or information needed on the performance indicator.
7. Data collection method – how the data or information will be collected.
8. Persons responsible – the specific person, unit, or collaborating entity that will be primarily responsible for collecting the data or information on the performance indicator.

A sample matrix showing the essential elements of an evaluation plan is shown below.

Evaluation Plan Matrix

| HIERARCHY OF TARGET RESULTS | PERFORMANCE INDICATOR | OPERATIONAL DEFINITION | BASELINE DATA | PERFORMANCE TARGET | DATA SOURCE/S | DATA COLLECTION METHOD | PERSON/S RESPONSIBLE |
|-----------------------------|--|---|---|---|--|--|-------------------------------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| Ultimate Outcome | Access to water by families in 36 waterless communities | Families in the 36 waterless communities have access to clean drinking water from a sustainable source. The <i>Salintubig</i> program aims for these families to have sustainable water sources that the community can develop, manage, and support | Access to water by majority is through Level 1 facilities; cost of Level 2 & 3 fees limiting access at those levels | All families in 36 waterless municipalities have increased access and use of water services | BWASA reports and monitoring documents ; stakeholder groups; household members | Document review; Ethnographic techniques; Survey; Key informant interviews; FGDs | Program implementer, national level |
| Intermediate Outcome | Mobilized stakeholder groups | Local investors, government agencies, NGOs, associations, social institutions, household members implementing activities toward increasing access to and use of water services | | | | | |
| Immediate Outcome | Stakeholders informed of importance and practicability of increased access to and use of | Local investors, government agencies, NGOs, associations, social institutions, | | | | | |

| | | | | | | | |
|----------------|---|--|--|--|--|--|--|
| | water services | household members implementing activities toward increasing access to and use of water services | | | | | |
| Outputs | Number and quality of IEC methods; Number and quality of IEC materials; Communication plan to implement IEC | IEC methods are appropriate to an draw from the experience of target stakeholders; IEC materials developed in a participatory manner; activities contribute to capacity building of participating groups | | | | | |
| Inputs | IEC methods IEC materials Communication plan | C4D approach uses the following strategies: Behavior Change Communication (BCC) Social Mobilization Advocacy | | | | | |

Step 12. Write your evaluation plan.

Develop your evaluation plan from the matrix you have constructed. Show how the elements in Columns 2-8 will help you determine the extent to which progress (or lack of progress) has been attained toward each of the target results.

How to Analyze Data and Information

Data you gather may or may not be in the form of numbers. Data in the form of numbers (quantitative data) are summarized into the pattern of findings by using descriptive statistics.

Ways to summarize data include using measures of central tendency such as means and averages or constructing graphs and figures.

With qualitative data or data that are not in form of numbers but are information, observations, or opinions, you do qualitative analysis. You may compare the data with some expectation, standard, or previous finding. The emphasis is on the stated experiences of the participants and on the stated meanings your participants or sources attach to themselves, to other people, and to their environment.

You use your descriptive statistics and your qualitative analysis to find out how the intervention achieved (or failed to achieve) its objectives.

How to Present Evaluation Results and Recommendations

Present your evaluation results simply and logically. Limit your presentation to: a) objectives or reasons for doing the evaluation, b) findings and what you think they mean, and c) what you conclude or recommend based on your findings.

Step 1. Tell them what you wanted to know and why.

Use your evaluation plan template as guide; it contains all the important elements that you used in your evaluation. Describe these elements from the highest level in the hierarchy of target results, the Ultimate Outcome, working downwards and across the rows.

Step 2. Then tell them the results.

This time, start from the lowest level – the Inputs – and proceed upwards. For each target result, present your summarized data or information. What do they mean, and what can you conclude from what you found out?

Use tables, graphs, or charts to summarize quantitative data, and matrices, direct quotations, or photographs and even real objects to present qualitative information.

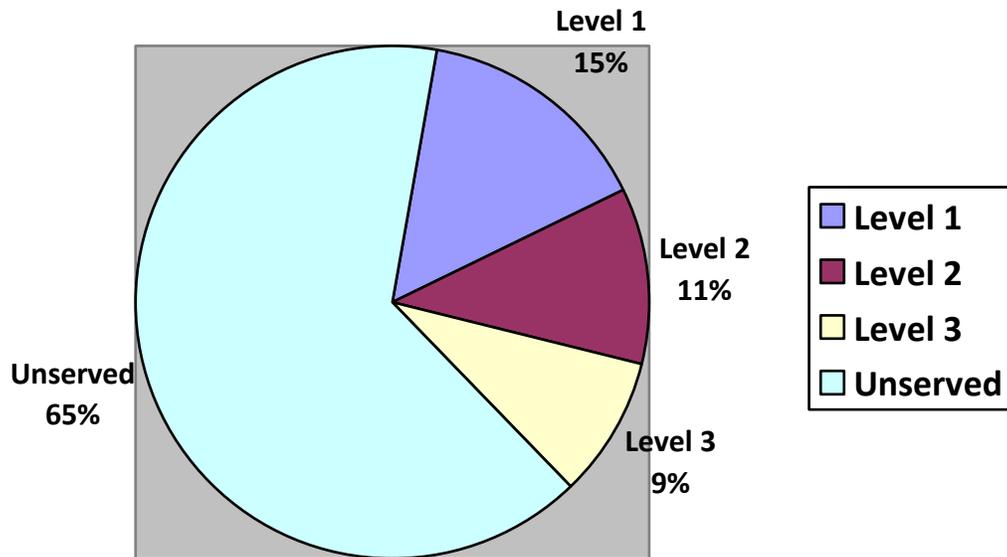
Example of a table:

Means of acceptability scores of communication media among residents of 3 barangays of San Isidro, Albay.

| Medium | Santa Lucia | Santa Fe | Santa Maria |
|------------|-------------|----------|-------------|
| Billboard | 87.23 | 72.56 | 67.89 |
| Radio plug | 83.60 | 90.24 | 88.44 |
| TV crawler | 43.74 | 31.25 | 27.80 |

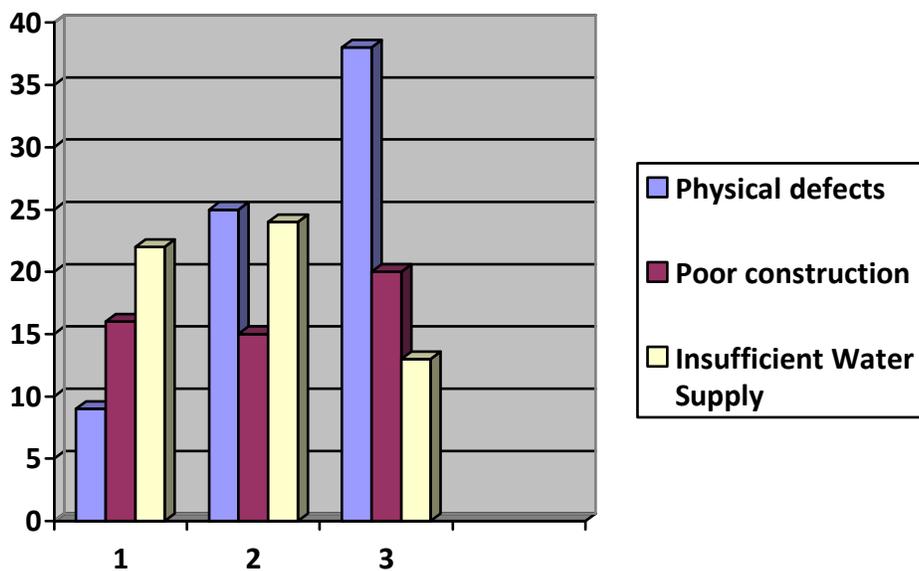
Example of a pie chart:

Population Coverage of Water Supply Facilities in 36 Municipalities



Example of a bar graph:

Reasons for Partial or Non-Functionality of Water Supply Facilities



Matrices of qualitative data:

| Likelihood | Consequences | | | | |
|----------------|---------------|-------|----------|-------|--------|
| | Insignificant | Minor | Moderate | Major | Severe |
| Almost certain | M | H | H | E | E |
| Likely | M | M | H | H | E |
| Possible | L | M | M | H | E |
| Unlikely | L | M | M | M | H |
| Rare | L | L | M | M | H |

LEGEND: L-Low; M-Medium; H-High; E-Extreme

SUMMARY OF PRETEST RESULTS: Guide to Communication Planning

| Place | General Comments | Text | Design/ Layout | Action Taken |
|---------|---|---|----------------------------------|--|
| Ozamis | <ul style="list-style-type: none"> ▪ Useful, informative and easy to understand ▪ Approach is helpful, i.e., introducing a concept by giving example then having a worksheet for user to accomplish ▪ Can be used by planners and local functionaries even for other projects ▪ Can be understood and used up to the municipal level without facilitation but will need facilitation if material will be used at barangay level | <p>Easy to understand except for the Framework, i.e., ACADA which is still technical</p> | <p>Make the cover attractive</p> | <p>Suggested revisions were incorporated, e.g.,</p> <ul style="list-style-type: none"> - Acronym for ACADA - Example of messages using various appeals - Use of IEC plan as justification for budget allocation - Example for worksheet no. 6 - Implementing mechanisms - Explain problem analysis |
| Dipolog | <ul style="list-style-type: none"> ▪ Useful, informative, easy to understand, helpful systematic ▪ Comprehensive ▪ Covers what is needed to be able to make a communication plan ▪ The problem is how to put into action behavior change communication ▪ Understandable without facilitation up to the municipal level but will need guidance if material will be used at barangay level | <ul style="list-style-type: none"> ▪ Easy to understand ▪ Comprehensive | <p>Use illustrations</p> | <p>Suggested revisions were incorporated, e.g.,</p> <ul style="list-style-type: none"> - Budget appropriation - Example of activities |

Step 3. Finally, give your conclusion and recommendations.

What can you recommend to the implementers, donors, and stakeholders of the intervention?

You can recommend measures to improve or sustain its performance if you are doing a formative evaluation, or ways to utilize the outcomes or lessons if you are doing a summative evaluation.

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