



# Local Monitoring Initiative Planning

Summer 2018

## Overview

In trying to figure out if the needs of citizens are being met, it is important to have an informed understanding of where things are and, as interventions and efforts for improvement move forward, if things are getting better, worse or staying the same. Doing that requires monitoring over time, which in turn means gathering data and information. The analysis of such data then provides the evidence base for whether things are working and where improvements - whether slight or dramatic - might be needed. Such evidence can help correct misconceptions, fill in gaps of understanding, provide the basis for advocacy or inform choices.

While some data may be available already, understanding it is important for being able to analyze and make sense of it. Where data isn't available, initiatives can be set up to collect it. Even if available, such as from a government agency or multilateral organization, there may be a desire to validate it by collecting data independently. No matter the size or scale, what remains critical is having a well-thought out plan for collecting data and monitoring it over time, as well as providing clear explanation of your analysis to ensure credibility and avoid misunderstanding.

For communities and civil society groups that represent citizens, monitoring initiatives are one of the ways of promoting more accountable and responsive government. It fits into a variety of tools that can be used to engage citizens in ensuring their needs are being met; others include community awareness initiatives and town hall style events with officials. Monitoring activities are particularly useful to encourage greater transparency while also being useful for promoting cooperation with other stakeholders providing data that others can use for their own initiatives. Keep in mind, however, that monitoring may also be a subject of misunderstanding among stakeholders, so be mindful of who may be interested in your monitoring activities, the data you collect, and your findings. Doing so will be helpful as you design and carry out more successful monitoring activities and may shape how you make findings public. Be open for dialogue and cooperation, as this could decrease possible misunderstandings and increase data quality.

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# Chapter 1

## Planning

### 1.1. INTRODUCTION

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Monitoring is observing and checking the development and/or quality of something over a period of time by means of systematically gathering and analyzing data and information.

There are a number of reasons why citizens, civil society organizations or others may be interested in monitoring. There may be interest in better understanding ‘how things work’ between the government and communities. There may be interest to ‘shed light on’ or make public service delivery processes more transparent. Whatever the reason for monitoring, there should always be a goal in mind. For some communities and civil society organizations, they want to:

**Learn and understand** more about society, its components and the impacts of processes that take place

*(e.g., how local government refers to the problem of unemployment?).*

**Create theories or conclusions** about social actions

*(e.g., general impact of government’s measures is positive because unemployment decreased, but there is no impact on women unemployment).*

**Improve social conditions** *(e.g., change measures to reduce women’s unemployment).*

#### 1.1.1 What can we do with monitoring results?

In short, we use them to build knowledge and *to change/improve lives.*

**Make decisions** in our work or about our work.

*E.g., "the data have shown that there is a problem we have to deal with... , and this problem can be addressed in the following way, based on the findings from our monitoring..."*



**Improve activities and services** such as medical, social, customer care, project applications.

*E.g., "the monitoring results have shown that current funding for medical services in our town are insufficient to meet the needs of all community members... , so resources may need to be better allocated to address all needs... "*

**Persuade others** that change and/or improvement should take place.

*E.g., "the data from our monitoring of river pollution have shown that we need a local river protection plan."*

**Affect change** in behavior, policy, document, process, etc.

*E.g., "the results of traffic monitoring in front of kindergartens and schools have shown that motorists consistently drive faster than posted speed signs. Based on our findings and analysis, and in the interest of the safety of students and teachers, we recommend that it is necessary to set a sign with a lower speed limit and request a greater police presence that will control compliance with the speed limitation. It is also desirable to set up sliding obstacles to slow speed or even prohibit traffic on this street."*

### 1.1.2 What can be monitored?

There are many things that can be monitored. Most monitoring projects focus on either monitoring a process (e.g., how a budget is developed; how the tender process for building a road in the community is carried out; how well a public information campaign reaches the community) or performance (e.g., the community budget was responsive to community needs, the agency responsible for selecting the vendor for the road tender followed all required rules and regulations).

#### **The process of creating, adopting, implementing, or assessing laws, policies or regulations**

Local level examples could include:

- Monitoring the process of local budget creation
- Monitoring budget spending (more can be find on link to Nabz-Iran's "Budget Process in Iran" primer: [www.nabz-iran.com/en/content/resource-english/iran-budget-process-primer](http://www.nabz-iran.com/en/content/resource-english/iran-budget-process-primer))
- Monitoring the implementation of the local strategy on increasing employment opportunities for youth
- Monitoring the adherence to conventions about the accessibility of people with disabilities to public buildings and services, or other international treaties or conventions your country has signed on to.



## **The process or performance of the work of public officials, institutions and other entities, such as municipal councils, commissions, etc.**

This may include monitoring their scope of work, compliance with plans, strategies and/or regulations, achievements, respect for key principles (e.g., transparency and accountability). Local level examples could include:

- Monitoring delivery of local services (such as trash collection) by the local agency/entity responsible for delivering the service as well as the government's oversight of such service. (More can be found on link to Nabz-Iran's "Service Delivery Monitoring" Online Course: [www.nabz-iran.com/en/course/service-delivery-monitoring-how-to-hold-government-accountable](http://www.nabz-iran.com/en/course/service-delivery-monitoring-how-to-hold-government-accountable))
- Monitoring the level of transparency of local government. This could be through monitoring the proceedings of council meetings, tracking voting records, or the availability of council documents (agendas, minutes, etc.) to the public.

## **Other political processes, such as campaigning and voting**

Local level examples could include:

- Monitoring the local campaign platforms and promises of candidates running for office
- Monitoring that political campaigns comply with governing legal frameworks
- Monitoring local elections

### **1.1.3 Who can be involved in monitoring?**

Anyone! Public agencies, civil society organizations, citizens and community members, media, and so on. Each of these subjects could monitor or be monitored because they all work in a public sphere. Public work is subject to - and benefits from - a public view and inquiry.

## **Key questions in designing monitoring and data collection initiatives**

When you start to design a monitoring initiative, you should focus attention on key questions such as:

- For what purpose? How will you use the data that you collect?
- How much data should you gather and collect?
- When should you conduct your monitoring initiative?
- What might be some challenges and obstacles?

- What might be some opportunities that you can capitalize on for your initiative?

Data collection can be a very long-lasting job. Namely, when we go into collecting data, everything could seem important and then we find ourselves in an ocean of data with the risk of straying from our original goal. The key is to decide before you even begin: What will we do with this data; What data do we really need; How much data is enough to make the conclusions; and Do we have the capacity to undertake the data collection and analysis?

For example, is it important that we ask 35 questions or can we get enough information if we just ask 10? Do we have the required skills, or will we need any special training or guidance before we begin our monitoring activities?

#### A FEW TIPS WHEN PLANNING A MONITORING INITIATIVE

- Start small!
- Pilot projects can be a good way to build your monitoring capacity on a small budget or when you have a limited amount of time. Don't bite off more than you can chew!
- Try different techniques and learn from the process and results. Be open to criticisms and learn from mistakes. Monitoring initiatives can be iterative and can be revised and improved over time.
- Explore opportunities to use data collected by other organizations, or work with others to develop methods for monitoring similar issues.
- Plan realistically! Do not plan what you have no capacity or resource (human, time, financial) to do. Never promise more than you can achieve.
- Think creatively about getting local experts or community groups involved.
- Proving your capability in this way may help attract more resources and cooperation in the future.

Furthermore, it is important to decide for which purpose we need data: maybe to support the project background to write a new project proposal; to raise public awareness at a high-level public event to sensitize the public on current practices; to gather additional evidence and data for our advocacy initiative to change a law; to advocate for improved public services. By answering these questions we will get part of the answer of how deeply we want to or should go. It will also help us know our monitoring timeline and help us identify the key target group(s) we want to present the results to whether for informational purposes or to try to influence them for change.

### 1.1.4 Successful monitoring and data collection needs systematic planning

Successful monitoring requires adequate resourcing and early planning. Monitoring can become very complex and, depending on what the initiative is, risky. Because of these factors, timely planning is very important. Systematic planning can identify time and personnel requirements, relationships you may need to build or strengthen in order to make your project a success, and resources you may need to carry out your project. A comprehensive plan can also help you identify gaps and challenges that you may encounter along the way.



When the data collected as part of the monitoring activity is not relevant or not able to measure the expected outcomes of the initiative, a number of problems can arise. Review and evaluation will be of little value if the available data cannot answer our questions.

#### A FEW TIPS WHEN MANAGING A MONITORING INITIATIVE

- Data collection can take longer than expected - allow plenty of time and set up good systems and processes for data collection, storage, management, analysis and reporting.
- Consider an independent review of the methodology, as good quality data and information is important. You want to 'patch' as many holes as possible before you begin. This will make the data and information you collect more solid. The fewer holes people can put into your process, the stronger your data and findings will be.
- Provide early feedback on monitoring results and allow opportunity to discuss these. Remember, you can always tweak and revise your monitoring process as you go if it makes your initiative stronger and the data more sound.
- Monitoring is often a long-term process and there could be changes in the people involved over time. The process should therefore be documented and filed in an accessible location, in order to account for these potential changes.
- Think ahead, plan well and assign a good project manager and/or coordinator. Actively manage the initiative - risks decrease with good management.

## 1.2. PLANNING YOUR INITIATIVE:

### FIVE STEPS TO REMEMBER

#### 1.2.1 Step one - Determining the purpose and the scope of your initiative: What is your ultimate goal?

The best place to begin your monitoring initiative is to think about where you want to end up. Knowing and understanding how you think that you will use the information you collect during your monitoring initiative will help you develop a proper plan. This plan can help you move from having an interest in a topic to knowing more about it. This can also help you develop specific monitoring question(s) and determine the right monitoring plan design. A key step in the planning of monitoring is to be clear about its purpose and scope.

**What is the purpose of your initiative?** What do you want to achieve by conducting a monitoring initiative? Is it to reflect gaps in existing knowledge or to provide evidence to be used in an advocacy or public awareness campaign?

**What is the scope of your initiative?** How much time will you need? Do you have any resource or personnel constraints?

## 1.2.2 Step two - Identifying the problem that your question will address and developing appropriate objectives

There are countless problems that you may want to address through your work:

- Advocating for more, better services for your community
- An interest in having a more transparent and accountable government
- Educating your community on government processes
- Raising public awareness on an important issue

### **WE CANNOT HOWEVER ADDRESS ALL PROBLEMS!**

There are many problems we see around us but we cannot deal with all of them.

Criteria for selecting a relevant problem, may include:

- Does the problem fit with the goal, purpose and scope of your project (see step one above)?
- Is your problem relevant to the organization's priorities?
- Is the problem relevant to your mission?
- Is evidence available?
- Is there a known alternative position?
- What are your chances of success?
- What might the impact be on stakeholders?
- What is the potential for cooperation and/or alliances with others?
- Are there any known opportunities if you tackle this problem?
- Do you have adequate human and material resources?

Once you select a problem, analyze it. What are the causes of the problem? What are the consequences (effects)? A useful technique to answer these questions is the "problem tree analysis" (problem/causes /consequences), see figure 1.1.

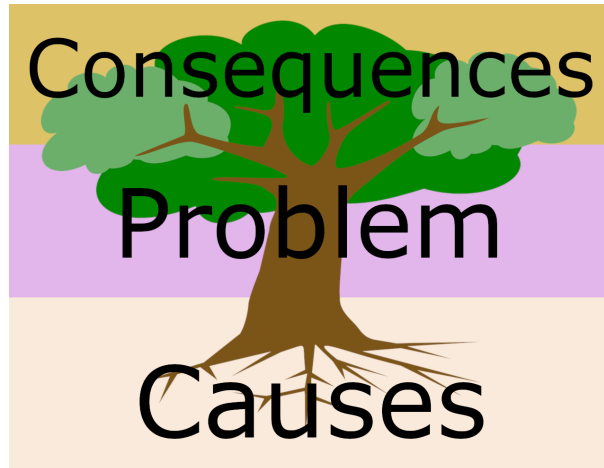


Figure 1.1: Problem tree, causes–problem–consequences (effects)

Conducting a problem tree analysis exercise can help you identify a more specific problem that your monitoring initiative can address. By identifying the problem and then the relevant causes and consequences, you can hone in on the question your monitoring project will focus on. Below is an example that helps to illustrate this.

### Example 1.2.1

**Consequences** It becomes dangerous to swim in the river; there are fewer river species; the water becomes dangerous for animals to drink from; there are more cases of gastric and digestive diseases; other negative environmental changes.

**Problem** There is pollution in a local river.

**Causes** Lack of environmental awareness by the local population about throwing garbage into the river; disrespect of regulation by factories who affect river pollution; lack of local public policy on environment and sustainable development.

The more you know about the subject and the problem, the easier it will be to monitor. This will also make your monitoring initiative more relevant. Doing some background research can help.

1. Conduct a literature review of existing documents
  - Learn more about the issue can help you in recognizing the trade-offs you'll need to face.
  - Identify similar initiatives to the one you are thinking of doing.
  - Find and select appropriate measurement instruments.
  - Anticipate common problems in your context.
  - Gather information on relevant policies, laws, programs, budgets and other considerations affecting.
2. Determine what other information you may need (this is what your monitoring project may, in part, do!)

- Meet those who know more about the issue by speaking with field workers, experts, opinion makers, and/or beneficiaries.
- Collect testimonials or first hand stories (beneficiaries, public), or
- Review existing research or do your own opinion survey.

### 1.2.3 Step three - Developing your key question: What question are you looking to answer with the information you collect from your initiative?

This is the core of what you want to know or a statement that is to be tested. To be effective, it:

- Must be linked to monitoring plan design
- May need to be revised during the process of monitoring plan design

This question should help you focus on the purpose and should define the investigation, and it helps you set the scope of your initiative (such as setting boundaries) and provide direction.

Your monitoring initiative should also have well articulated, specific objectives. Your objective should be SMART: **S**pecific, **M**easurable, **A**ttainable, **R**ealistic and **T**ime-bound.

Depending on the nature of your question and objectives, you may begin to think about the direction that you believe the answers will take, or a working hypothesis. But, don't allow your analysis to be biased by that.

Start to think what data you (really) need to collect through the monitoring initiative.

In that process you may need to redefine your objectives and/or monitoring question. You may need to change the scope or content of the data you want to collect. This process can take longer than you want or plan, can be boring and tedious; but every minute you devote to problem, question(s) and objectives defining, you will be paid back later in the process.

### 1.2.4 Step four - Situation analysis and capacity assessment

The next step is to do a situation analysis and capacity assessment for the initiative, which helps bringing the pieces together. Here are a few tools that can help you better understand the operating environment for your monitoring initiative.

#### SWOT Analysis

One of the methods is SWOT analysis which helps you to recognize your internal strengths and weakness (human, technical and financial resources; image, relationships, information availability, etc.) and external opportunities and threats (political, economic, social, technological,

legislative and environmental - "PESTLE"). It is a simple process: just list your points in the SWOT chart (see table 1.1 for an example).

The SWOT analysis will help you answer questions important for initiative planning. Here are some of the questions you can ask after you do a SWOT analysis: how will our internal weaknesses affect the implementation of the initiative? how can we make more use of internal strengths and reduce our weaknesses? Are external threats and risks too big, will it be possible to implement this initiative? What is our plan for tackling threats? How can we take advantage of our external opportunities?

	Positive	Negative
Internal (to your organization)	<p><b>S</b></p> <p>strength 1 strength 2</p>	<p><b>W</b></p> <p>weakness 1 weakness 2</p>
External (your operating environment)	<p><b>O</b></p> <p>opportunity 1 opportunity 2</p>	<p><b>T</b></p> <p>threat 1 threat 2</p>

Table 1.1: SWOT Chart

## Stakeholder analysis

Another useful step in designing a monitoring plan could be stakeholder analysis. Stakeholders are individuals, groups or organizations who care about your issue. This could be people who are affected by the issue (e.g., parents, students, unemployed, civil society organizations, etc.), people who can influence the issue (e.g., local government, international community, civil society organizations, academia, journalists, etc.), or people who may care about the outcome of your monitoring initiative (businesses, community leaders, consumers, etc.).

Some of them are your natural or potential allies who may want to cooperate, help or support your monitoring activity. Others may be the opponents of your monitoring initiative - they may make it harder or even prevent some of your activities. Conducting a stakeholder analysis is useful to find out, in a timely manner, all individuals, groups, communities and institutions who could influence your initiative and to predict the type of influence (positive or negative) of particular actors. This can help you think about a strategy to attract the most effective support for initiative or reducing potential obstacles.

Influence	High		
	Low		
		Low	High
		Power	

Table 1.2: Stakeholder Matrix

Before moving on to the next step, check your SWOT and stakeholder analysis with the objectives you have set in step two. If you feel that objectives are not set up realistically and clearly, it is a moment to reformulate them.

### 1.2.5 Step five - Monitoring plan design

Now you can design your monitoring initiative, which should include two-level planning: a research level and an action level.

YES, MONITORING IS A FORM OF RESEARCH (BUT RESEARCH IS NOT MONITORING)

Monitoring (and any other type of research) is all about data. Monitoring initiatives may involve one or more methods of data collection (e.g., observing the process, filling out questionnaires). It is important to learn basics about data, methods of collection, processing and interpretation. In the following link you can find a primer on using data for accountability: [www.nabz-iran.com/en/content/resource-english/data-and-accountability-primer-activists-monitoring-political-processes](http://www.nabz-iran.com/en/content/resource-english/data-and-accountability-primer-activists-monitoring-political-processes)

#### Developing an action plan

Develop an action plan! Map out a clear project plan that includes:

1. What will happen? What are your key activities?
2. What is your timeline of when these activities will take place?



3. when and how regarding collection, reporting, analysis, presentation and dissemination?
4. What resources do you have and what resources might you need?
5. Who is responsible for each activity?
6. What are your possible risks for each activity and how will you mitigate them?

# Chapter 2

## Implementation

### 2.1. COLLECTING DATA

**Data** usually refers to raw or unprocessed (unanalyzed) facts, figures, or details. It represents values of qualitative or quantitative variables.

Once the data is analyzed, it becomes *information* - a sequence of data that can be interpreted to provide knowledge or insight about a certain matter.

In short, information is generated from data being processed.

Data vs. Information	
Data	Information
Raw, unprocessed, unorganized facts; something simple and seemingly random and useless until it is organized.	Processed, organized, structured or presented data in a given context; a product.
In the form of numbers, letters or a set of characters, etc.	In the form of ideas and findings.
Collected through measurements, experiments, monitoring.	Created through linking data and making inferences.
Represented in a structure (tabular data, data graph, etc.)	Represented through language, ideas and thoughts based on the data.
Carries limited meaning by itself.	Carries logical meaning that has been assigned by interpreting data.
Example: Each pupil's test score is one piece of data.	Example: The average score of a pupil, class or school is information that can be derived from the given data.

Therefore, through monitoring you are collecting data that you will then process, organize, analyze and present as information, or findings.

Remember, data you collect in the course of monitoring activities is what you collect during present time. You may need to collect other data about what has already occurred in the past - this is known as background research and drawn from other sources than direct collection by you. The data and information that you collect during your monitoring is a little different



because it is current and something you can validate. In the next few sections, we are talking only about data, methods and analysis as it relates to monitoring.

### 2.1.1 Primary and secondary sources of data

In your monitoring initiative, you will want to identify where you will collect data from: primary or secondary sources. You will need to determine which you have ready access to and which you and your team may need to take additional steps in order to access. Examples of both primary and secondary sources that you may collect as part of your monitoring initiative are below.

Differences between data sources	
Primary data	Secondary data
Data collected by the researcher/observer	Data that already exists
<ol style="list-style-type: none"> <li>1. Direct observation</li> <li>2. Questionnaires</li> <li>3. Interviews</li> <li>4. Action research such as focus group discussions or workshops</li> </ol>	<ol style="list-style-type: none"> <li>1. Previously conducted research studies</li> <li>2. Government reports</li> <li>3. Reports from international organizations and civil society</li> <li>4. Official statistics</li> <li>5. Media articles or reports</li> <li>6. Historical references</li> </ol>

These are some benefits of the use of secondary sources:

- It may be used to offer general background information
- It can provide information on historical data (i.e., in comparison to year to year)
- It could help to prove or disprove an argument or theory
- It may be useful for putting the monitoring initiative into context
- It can help to save time and money

However, always carefully consider the reliability and validity of secondary sources. Authenticity, credibility, representativeness are very important!

- Is the source reliable?
- Does the source considered an expert or authority on the subject? Are they believable?
- Is the source include information or data that is relevant to all your monitoring initiatives stakeholders or beneficiary groups?
- Who might oppose this data source?

## 2.1.2 Planning your data collection

Think about who will or could use your findings:

- Who stands to gain the most from it?
- Who stands to lose from your findings?
- Whose behaviors might change as a result of the lessons learned from it?

This will lead you to consider which kinds of information you need and, therefore, which kinds of data you need and at what levels of detail you will need to record.

For example, legal and policy regulations may prescribe the need for some types of information, the methods used to collect information, the way in which it is presented, and the timing of its presentation. These requirements need to be included into an overall methodology for data collection.

It is always important to begin your initiative with a baseline of data or information. This comparative perspective can help to situate your final analysis once all of your data has been collected.

*"Forty five percent of social welfare beneficiaries in municipality A are (not) familiar with their rights."* Is this a problem or an improvement?

Data collected will not provide useful information for monitoring without a baseline, a minimum or starting point used for comparisons. Monitoring data should be comparable and collected consistently. Data may already exist or may need to be sourced to establish a baseline. Find out what data already exists, where it is available and if it is accessible. The background research that you do before starting your project as part of the planning process or in defining the problem can help you set a baseline.

How do you set your baseline? The following sources can be helpful:

**Official Statistics** Governments, international and national organizations and other bodies collect and produce vast amounts of statistical data, e.g., birth/death rates; marriage, fertility and divorce patterns; crime and suicide rates; health information; economic information; employment and unemployment details; strikes; productivity, etc. Think about how these data could be used in monitoring.

Keep in mind that the reliability and validity of official statistics must be considered by researchers when referring to them.

**Media** Media could be a useful source of information about current and historical affairs, events, public opinions and general attitudes. They are sometimes inaccurate or incomplete and the reputation of the source often matters; there is usually a degree of personal and/or political subjectivity - possibly by the author, editors and/or the audience. Therefore, the reliability and validity can obviously be questionable.

Media, on the other hand, could itself be a subject of monitoring or research analyzing the media content, approach, impartiality, etc.

### 2.1.3 Reliability, validity and practicality of data

**Reliability** When choosing a monitoring method, go about being as reliable as possible, being as objective as possible and applying and demonstrating process of collection and analysis methods and systems. This useful link to Nabz-Iran's online course on "[Verifying Information in Challenging Environments for Citizen Monitors](#)" could help you.

**Validity** The validity of data refers to the truth that it tells about the subject or phenomenon being monitored. A valid statement provides a true measurement, description and/or explanation of what it is claiming to measure or describe.

**Practicality** The practicalities of the research need to be carefully considered when developing the research design, depending, for instance, on the cost and budget, time scale, and size of sample required.

## 2.2. METHODS FOR ANALYSIS

When planning your monitoring initiative, you will want to consider which methods are best to collect the data that you need. Different goals require different approaches and methods, which are typically categorized as either quantitative or qualitative.

*Quantitative research* is the systematic investigation of observable phenomena via scientific methods with the aim of developing models, theories and hypotheses to understand and describe the phenomena. *Qualitative research* relies on non-numerical data, and refers to the meanings, concept definition, characteristics, metaphors, symbols and description of things.

While, measurement is essential to the quantitative research, qualitative research uses case studies and similar techniques to analyze the sample.

Key differences between qualitative and quantitative research		
	Qualitative research	Quantitative research
<b>Type of knowledge</b>	Subjective	Objective
<b>Aim</b>	Exploratory and observational	Generalizable and testing
<b>Characteristics</b>	Flexible	Fixed and controlled
	Contextual portrayal	Independent and dependent variables
	Dynamic, continuous view of change	Pre- and post-measurement of change
<b>Sampling</b>	Purposeful	Random
<b>Data collection</b>	Semi-structured or unstructured	Structured
<b>Nature of data</b>	Narratives, quotations, descriptions	Measurements and observations
	Value uniqueness, particularity	Replication
<b>Analysis</b>	Thematic	Statistic

Qualitative and quantitative research look distinct and opposite but in practice they are often combined or draw on elements from each other. For example, quantitative surveys can include

open-ended questions. Similarly, qualitative responses can be quantified. Qualitative and quantitative methods can also support each other, both through a *triangulation* of findings and by building on each other (e.g., findings from a qualitative study can be used to guide the questions in a survey).

### Triangulation

The combination of qualitative and quantitative and primary and secondary research is known as triangulation or methodological pluralism - the benefits of the ability to cross check, filling the gaps.

## 2.2.1 Choosing a method

When deciding about methods, consider the following questions:

- Does it provide a means of measuring what is happening?
- Is it repeatable (i.e., will the results hold across sample)?
- Will it provide data in the timeframe that you need it?
- Is it efficient? Could you collect the same data with fewer or less complex methods?

### Multi-method monitoring strategy

Using more than one method enables triangulation - the benefits of the ability to cross check and fill in gaps of data. Most monitoring efforts use more than one method. If you choose to use multiple methods, this strategy should complement or support your monitoring initiatives. A multi-method strategy should help you gather the data you need, and should not make things more difficult or complicated.

## 2.2.2 Quantitative methods

### Overview

Quantitative methods use mathematical, statistical or computational techniques to analyze the collected data. They assess and measure, generalize and draw conclusion, which could be replicated and examined by the others.

For a monitoring initiative, you are most likely to use the following tools to collect quantitative data in order to learn:

**Surveys and questionnaires** developed and structured to provide numerical data that can be explored statistically and yield a result that can be generalized to some larger population.

**Quantitative observation** carried out in a quantitative context, e.g., number of people accessing service, counting the use of service, ascertaining busy/quiet times, etc.

## Surveys and questionnaires

Questionnaires or social surveys are tools used to collect standardized data from large number of people - the same information is collected consistently across populations and time. They often collect data in a way that can be readily analyzed and can produce useful statistics. Three types of survey include:

**Factual surveys** used to collect descriptive information, e.g., the government census;

**Attitude surveys** used to collect and measure people's attitudes and perceptions, e.g., opinion polls;

**Experience survey** used to collect information about experiences that can easily be quantified, e.g., how would you rate the quality of that service on a scale?

Questionnaires consist of the same set of questions that are asked in the same order and in the same way so that data can be gathered in a consistent and coherent manner.

There are several ways to administer questionnaires:

- Filled in by the participant;
- Asked in a structured and formal way by an interviewer;
- Postal / e-mail questionnaire;
- Administration of a questionnaire to a group;
- Telephone questionnaire.

There are five main types of survey questions and each type can be used to collect different data:

**Multiple-choice question** Often used to gather demographic data or to find out about a range of issues. Multiple-choice questions can require a single answer or offer multiple answer selections. Example: *What is your employment status? (Select one): unemployed, self-employed, employed.*

**Ordinal scale question** Asks respondents to rank a range of items or choose from an ordered set. Example: *When you consider buying things, please rank the importance of the following (Please fill in your rank order using numbers 1 through 6 with 1 being the most important): low price, brand, product design, quality at no cost, good price-quality ratio, shopping habit.*

**Interval scale question** These scales are asking about agreement strength, likelihood or satisfaction on an interval scale. It is important that the space between each option, whether it is a number range or a feeling range, are equal, to prevent it from becoming suggestive. Example: *Children under 3 years are not recommended to be exposed to device screens: 1) strongly disagree 2) disagree 3) neither agree nor disagree 4) agree 5) strongly agree.*

**Ratio scale question** Asks respondents to respond in a measurable way (e.g., ratio scale questions about income, age or hours spent). Example: *How many hours a day do you spend in front of device screens?*

**Open-ended question** used to gain more insight into how the respondent feels. This type of question requires coding<sup>1</sup> the answers because the answers could come in the form of a list, a few sentences or something longer such as a speech, paragraph or essay, so use it only when responses in the respondent's own words is important (and after you learn the process of coding). Examples: *What was the biggest challenge you faced in accessing quality healthcare? What was your favorite learning experience from the lecture you attended?*

Selecting the correct question type is an essential part of any survey, so carefully consider the question type(s) in order to obtain significant and meaningful data. When developing your questionnaire, also be mindful of the limitations to the tool. For example, if you have an interviewer ask the questions, they may be biased or lead the respondent to a certain answer.

Questionnaires	
Advantages	Disadvantages
Practical	Inadequate for understanding some issues
Anyone can conduct a questionnaire	Lacks validity
Most results are readily usable	Coding open ended questions could inject subjectivity
The results could be analyzed objectively	There is a level of researcher imposition – when developing the questionnaire

## Sampling for quantitative methods

Through accurate sampling of a subset of the population, cost can be reduced and you can gain a good representation from which you can infer or generalize about a broader population.

Accurate sampling requires a sample frame or list of all the units in a target population. A unit is, for example, the individual, household or school from which we are interested in collecting data. A sample frame for a household survey would include all the households in the population identified by location. For monitoring, your sample should focus on those that have a direct interest, are directly affected by or impacted by the issues your monitoring question seeks to

<sup>1</sup>A process to categorize data with the aim of facilitating analysis.

answer. In other words, it isn't logical to administer a survey questionnaire to airline pilots – who don't live by the river – if you are interested in the water pollution in your local river.

### 2.2.3 Qualitative methods

#### Overview

Qualitative methods are usually used in the social sciences (psychology, sociology, anthropology, etc.). They often focus on human behavior and the social world, which is difficult to measure with quantitative methods. Qualitative research methods are concerned with explanations of social phenomena. They describe the world in which we live, why things are the way they are, concerned with social aspects of our world. Qualitative data focus on issues related to 'quality' often looking at perceptions and experiences.

For monitoring, you may want to use qualitative methods to collect data that could help you answer the following questions:

- How community members feel about the waste collection in their neighborhood?
- How community's interest in recreational activities has changed since the increase of pollution in the river?

They seek to answer questions about:

- Community experiences and opinions
- How people are affected by the events/regulations that go on around them
- The differences in experiences between social groups, etc.

#### Methods of collecting qualitative data

There are a variety of methods but data are often gathered through individual interviews and focus group discussions using semi-structured or unstructured topic guides.

They are time consuming; therefore, data is usually collected from a smaller sample than would be the case for quantitative approaches. This can make qualitative research more expensive.

The main methods for collecting qualitative data are: a) individual interviews; b) focus groups; c) observations; d) action research.

**Interviews** Qualitative interviews should be fairly informal and participants should feel they are taking part in a conversation or discussion rather than in a formal question-and-answer situation. Interviews could be unstructured, semi-structured and structured. Regardless of the type of interview you decide to conduct, be sure to ask the same questions to each respondent to ensure data validity.

**Unstructured interviews** These are often referred to as "depth" or "in-depth" interviews. These interviews typically cover a limited number of topics. Unstructured interviews allow the discussion to cover topics in varying degrees of detail, without a structure or a preconceived plan or expectation of how to deal with the topic. However, the analysis can be time consuming.

**Semi-structured or focused interviews** These consist of a series of open-ended questions based on the topic areas the interviewer wants to cover. The open-ended nature of the question defines the topic under investigation but provides opportunities for both interviewer and interviewee to discuss some topics in more detail or a new line of inquiry introduced by what the interviewee is saying.

**Structured** The interviewer asks the respondent the same questions in the same way. A tightly structured schedule is used, without expanding on responses. The questions may be phrased to provide a limited range of responses, e.g., "*Do you rate services as very good, good or poor.*" Here you should consider whether a questionnaire or structured interview is more appropriate.

**Focus group discussion** A focus group discussion is an organized discussion among a small group of people (usually six to 12) and is used when obtaining data from a group may be more efficient or useful than from individuals. The ensuing dialogue can provide an understanding of group circumstances, behavior or opinions, and the approach may be preferred when you have limited resources (time, finance, etc.).

In a guided or open discussion, focus groups allow you to explore how a group thinks about an issue, the range of feelings, perceptions, opinions and ideas. It also provides insight into the inconsistencies and variations that exist in a particular group or community in terms of beliefs and their experiences and practices. It also provides participants with a space to discuss a particular topic in a context where people are allowed to agree or disagree with each other.

Focus groups are often used in market research about a new product or political analysis to formulate the reactions that can be expected from a larger population.

**Focus groups methodology** Purposefully, recruit participants for whom the issue is relevant. Participants should have something in common which is important to your monitoring question.

Be clear about the benefits and limitations of recruiting participants that represent either one population (e.g., girls in university) or a mix (e.g., boys and girls in university).

Several focus groups should be used to get a more objective and macro view of the investigation; the use of several groups will add to the breadth and depth of data. A minimum of three focus groups is considered best practice.

This method requires the researcher to use a range of skills: group skills, facilitating, moderating, listening/observing, and on-the-spot analysis. Questions are asked in an interactive group



setting where participants are free to talk with other group members. During this process, the researcher either takes notes or records the vital points that he/she is hearing from the group.

**Observation** During observation an observer takes notes (or fills out a reporting form or checklist) of what is happening. Observations can be structured or unstructured and are often lengthy and descriptive.

**Risks include**

Data collectors might miss out on an observation, if they are taking notes; there is room for subjective interpretation of what is happening.

**Direct observation** Using direct observation as a data collection method can be both incredibly interesting but also a challenge. A few points about direct observation:

- Direct observers typically don't become participants in the context;
- Data collectors watch rather than take part - the perspective is more detached;
- Direct observers should be as unobtrusive as possible, so as not to bias the observations;
- Technology can be a useful part of direct observation, such as through SMS responses, recording the event or observing from a distance;
- Direct observers benefit by focusing on specific monitoring questions - observing certain sampled situations or people rather than trying to become immersed in the entire context.

Observation	
Strengths	Limitations
Offers a flavor for what is happening.	People's behavior may change when they know they are being observed.
Provides insight into the bigger picture.	Only provides a "snapshot" view of a bigger situation.
Reveals existence of sub-groups.	The observer may miss something while they are watching and taking notes.
Can be used to assist in the design of the rest of the research.	The observer may make judgments of value statements or misunderstand what has been observed.

For example, techniques for collecting data through observation, focus groups and interviews, include:

**Tape recording** If allowable, making a recording of what you are hearing is an excellent way to document and collect data. This allows you to concentrate, listen and respond better. The discussion flows better when there are no distractions. The participants may feel less observed if the tape-record is used in a discreet way. The entire interview/observation is

recorded, which gives a better, more holistic picture of what is going on. It also, decreases risk of the researcher being more subjective. During analysis, the researcher has the opportunity to go back over material. Bias must be considered when taking notes or using tape analysis.

**Video recording** Same as a tape recording, except that people acting unnaturally towards the camera or others avoiding the camera; the camera may not always see everything.

**Photographs and artifacts** These can be useful when there is a need to collect observable data or phenomena such as elections, buildings, neighborhoods, dress and appearance (including objects of significance - memorabilia, instruments, tools etc.)

**Documentation** Any and all kinds of documentation may be used to support observation - a local paper, information on a notice board, administrative policies and procedures, etc.

### 2.3. ETHICS AND DATA PROTECTION

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Data protection is an ethical issue. It involves respect for individuals and their rights regarding privacy and the use of information about them. In many places, there are numerous legal obligations to protect that information.

Personal data is any data about a living individual who can be identified either directly from the data or by combining your data with other available information.

The three principles of ethics include: informed consent, confidentiality and avoiding harm to do good.

**Informed consent** Participants in the research should understand its objectives and should verbally give their consent to how their responses will be used. For research that is carried out with children or vulnerable adults, it is essential to acquire informed consent from a parent, guardian or responsible adult.

**Confidentiality** What might be the social and ethical implications of the respondent's engagement with you and the study? Consider the type of research you are undertaking, and see how can you best protect and safeguard their well-being and interests. For example, if you are looking at education services, what are the ways that the school children can be safely and ethically included in the research? If you work on the legal issues, how could you protect whistleblowers? And so on.

**Avoid harm and do good** How might this impact on the methodology of the research/monitoring? And the impartiality? How might this influence what you do with your raw data and your analysis?

These principles serve to protect the individuals, communities and environments involved in the research/monitoring against any form of harm, manipulation or malpractice.

Researchers must also consider their own personal safety from physical and psychological harm and to ensure they maintain professional boundaries.

### **2.3.1 Information for participants**

Regardless of whether the participants will be completing a questionnaire, participating in a focus group or interview, the following information should be provided to them in the local language, explaining:

- if their personal details will be included as part of your analysis;
- the purpose of the questionnaire, interview or exercise;
- whether they have to take part;
- what will happen if they do not want to participate;
- what will happen if they agree to participate;
- how long it will take;
- how confidentiality will be assured;
- if they may freely decline to answer any or all questions with no negative consequences;
- risks associated with their participation; and
- approximate date of completion and anticipation of how the information gathered will be used.

#### **Example 2.3.1**

We are the local group "River" and we are involved in monitoring the pollution of the local river. The purpose of this questionnaire is to gather the attitudes and desires of local community citizens on sustainable river management in order to bring our monitoring findings to the local authorities and influence the adoption of our proposed River Management Plan.

Your participation is anonymous and the obtained information will not be used for any other purposes. The questionnaire has 15 questions and lasts 5-8 minutes.

Participation in the survey is voluntary. If you choose to participate, thank you for your time.

Together for our river!

Local group "River" (tel. number, e-mail, web page)

### **2.3.2 Non-literate groups, minority groups**

If you deal with non-literate groups, think about how to communicate this information to them, for example in a group discussion and/ or with visual materials. Minority groups should receive information in their language, too.

# Chapter 3

## Presenting the results

### 3.1. DISCUSSING RESULTS AND DRAWING CONCLUSIONS

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The final stage of the research/monitoring process is to interpret the findings, making conclusions and recommendations. When drawing conclusions, review and summarize findings looking for explanatory patterns or relationships that help answer to a research/monitoring questions.

Questions to consider when interpreting findings:

- Did the methodology and data collected answer the research/monitoring question? Do the findings support our hypotheses, if any?
- How do the different findings interact? Do they explain each other or are there contradictions?
- Can we triangulate the data from a number of different sources (different stakeholders, different methodologies, external sources of information)?
- What were the limitations of the process and how do they affect the results?
- Are there any areas that require further research, monitoring or follow up?

#### 3.1.1 Mixed methods and triangulation

When both quantitative and qualitative data are collected, compare and contrast these findings together when interpreting. The integration of quantitative and qualitative research can give a broader understanding of the researched/monitored subject. Quantitative research can describe magnitude and distribution of change, for instance; qualitative research gives an in-depth understanding of the social, political and cultural context.

Mixed methods allows triangulating of findings, which can strengthen validity and increase the utility of work. Additionally, reflect findings in comparison to other research or evaluation work in the area and consider whether findings were similar.

## Understand limitations

When drawing conclusions and making recommendations it is important to recognize the limitations of your data.

In quantitative research, the level to which we can generalize findings to the wider population will depend upon the quality of the sampling strategy used.

Be careful not to over-generalize results: for example, suggesting a result is applicable for the whole country when only three out of twelve regions were sampled.

Findings from qualitative research should not be used to make inferences about a wider population but can be used to provide examples of how or why in specific contexts.

It is also important that conclusions and recommendations are based on the data collected rather than your personal opinions.

When reporting quantitative or qualitative data, you can only make valid conclusions on the topics researched/monitored and for which you have supporting evidence.

## 3.2. OVERVIEW OF REPORT FINDINGS

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### 3.2.1 Displaying and reporting

Any research/monitoring report must be guided by the transparency of the process through which conclusions have been drawn.

A report must therefore include:

**Introduction** Argues for the importance of exploring a particular research/monitoring question, highlighting the gaps in and limitations of existing evidence.

**Methodology** Justifies sampling strategy and the method used to answer the research/monitoring question, as well as the process through which data was collected and analyzed.

**Findings** Presents key findings emerging from the analysis that answers the research/monitoring question.

**Discussion** Highlights how the findings emerging from the study either corroborate, contradict or build on existing evidence as well as giving detail to the limitations of the project or study.

**Conclusion** Answers the questions:

- Has the research/monitoring question been answered?
- To what extent have the objectives been achieved?
- What has been learned from the results?
- How can this knowledge be used?



- What are the shortcomings of the research or methodology used?
- What recommendations are there?

### **3.2.2 Considering your audience**

Monitoring data and findings can have a variety of uses and purposes; therefore, carefully consider the audience to whom you will present your information and results. Potential readers of research findings may include:

- governments officials
- international community
- academics
- board members, managers and staff
- service users
- citizens
- media

So, use an appropriate approach and format (report, analysis, summary, graphics, press release etc.) to present research and visualize your data/findings, accordingly.

## **3.3. DISSEMINATION OF FINDINGS**

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Think about your stakeholders, audiences and targets. You may disseminate your findings to some or all of them by sending directly to them, publishing on the web site(s) and social networks, using media, or organizing public events (press conferences, roundtables, conferences, panels, meetings, etc.).

### **3.3.1 Framing your message**

You may need to consider:

- Why should they listen?
- Why should they take action (if you want any)?
- What actions do you want them to take?

Then tailor your core message:



- What you say - ideas, arguments
- How you say it - language, style, format
- Who says it - appropriate messengers
- When, where and how you deliver it

### **3.3.2 A test for clarity**

Is your language accessible? Have you chosen language your audience can understand, avoiding jargon, technical or project term, ...?

Did you send a clear request for action? Will the audience know what to do if they agree with you? (For example: *call someone, convince others to support the action, etc.*)

# Conclusion

The goal of monitoring processes is to improve them so they are responding to the needs of people. When done well and conveyed effectively, it can provide data that are useful to informing choices, supporting advocacy for change, correcting misconceptions or galvanizing communities to work together. As this guide has shown, however, good monitoring requires proper planning and thoughtfulness. Moreover, data and information gathered through the process is only as useful as it is effectively communicated and shared with appropriate stakeholders in a manner that is meaningful and useful to them. By putting in the time to plan and continuing to adapt as necessary, efforts can yield important results that improve communities and the lives of those who live there.