

## HOW TO PLAN A BASELINE STUDY

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All hyperlinks to other TMEA documents have been disabled

This guide summarises essential information about planning baseline studies. It does not provide technical details, but outlines key areas to consider, and references further sources of information. It complements the main TMEA monitoring guidelines, which you can download here. Throughout this document, press control and click on blue links to download other TMEA or external guidelines.

### 1) What is a baseline study?

A baseline study measures the situation at the beginning of the project. This can then be compared to the situation after the end of the intervention, to establish what change has occurred.

### 2) Why conduct a baseline?

A baseline is required if you wish to show change in a situation. Consider the following data, for a fictional one stop border post:

| Before Project (Baseline)          | After Project                      | Change                                       |
|------------------------------------|------------------------------------|--|
| It took 12 hours to cross a border | It takes 5 hours to cross a border | Border crossing time has reduced by 7 hours. |

A single measurement, taken after the project, would reveal that it takes five hours to cross the border. Without a baseline, you would not know how long it had taken before the project, so could not tell if this was an improvement or not. By capturing the initial situation, the baseline allows you to measure change.

It is not necessary to collect baseline data for every indicator. Take into account the cost of collecting data and the importance of that indicator, and consult the Knowledge and Results team for more guidance. You should collect baseline data for your key outcomes, in particular those relating to the four TMEA organisational outcomes, and others as required. Other examples of indicators which could require baseline data include:

| Project Outcome  | Required Baseline Information   |
|--|---|
| Improve the skills and knowledge of freight forwarders.      | What were the skills and knowledge of freight forwarders before the start of the project? |
| Reduce the amount of money importers spend on customs bonds. | How much money did importers spend on customs bonds before the start of the project?      |
| Reduce the tax burden on SMEs                                | How much tax were SMEs paying before the start of the project?                            |

As well as measuring impact, baselines can fulfill a number of other purposes:

- They provide useful information on the extent and type of problem faced.
- They help set realistic and achievable targets.
- They can engage other stakeholders in the reform process, by involving the private sector, businesses, and widely disseminating baseline results.

#### **Training Transporters Baseline**

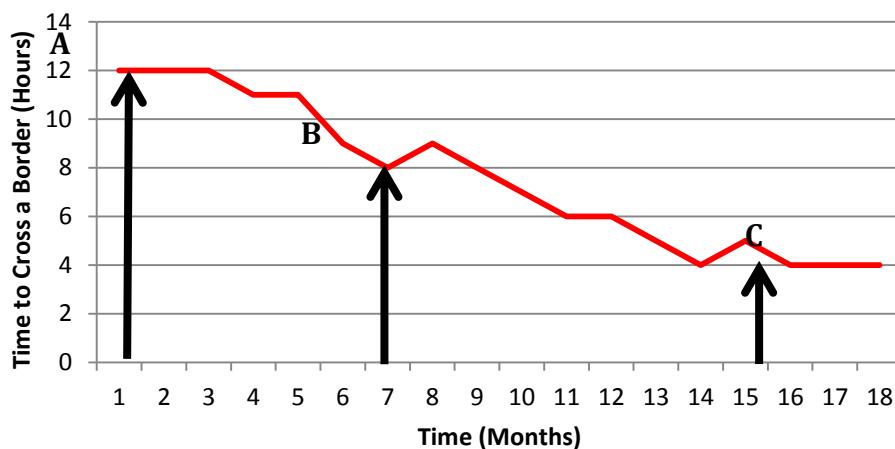
Before launching a project to train transporters, the freight logistics team at TMEA commissioned a training needs analysis, to identify current training providers and gaps. The consultant surveyed 649 transport operators, including drivers, mechanics, and administration staff from across the East African region. The consultant found that only 37% had received training, and identified the priority training needs. This provided baseline information as well as informing the future direction of the project.

### **3) When should the baseline be conducted?**

The baseline should be conducted only after developing a results chain and monitoring plan. These will clarify the logic of your project, and specify key indicators. Without them, you may collect irrelevant data in your baseline study, which will not help you measure your outcomes. For full details on the steps that need to be taken before a baseline study is conducted, download the TMEA monitoring guidelines [here](#).

The baseline should be conducted before the project has an observable impact. This is not necessarily before the beginning of the project. Many TMEA projects take months or years for the outcomes to be observable – you could conduct a baseline before that point. However, if it is delayed, the situation may change due to your actions, which will reduce the observable effects of your project. Take the following fictional example:

#### **Time to Cross an East African Border**



A good baseline could be taken at point A, and compared to a final survey at point C. This will show that the time to cross a border decreased from 12 hours to 4, suggesting that the project reduced crossing time by 8 hours.

However, suppose that the baseline was conducted late, at point B. This would show that the crossing time was only 8 hours, as the project has already begun to have an impact. When compared to the final survey at point C, it would seem like the project had only reduced the border crossing time by 4 hours, underestimating the impact.

If you are mid-way through project intervention, yet do not have a baseline, it is possible to retrospectively create one. This will not show the impact of your project as reliably, but if you do need to do so, see below.

#### 4) Planning the baseline

When planning the baseline study, consider the following questions:

- **What indicators are you measuring?** This is the core of your baseline. Exactly what data do you want to collect? This should be informed by your results chain and monitoring plan.
- **What's your budget?** It is sometimes tempting to conduct the baseline as cheaply as possible, but this can be a false economy. If you do not clearly demonstrate your impact, the money will be wasted.
- **How rigorous will it be?** Results must be reliable, well-documented, and convincing to a well-informed observer. Conduct as rigorous a study as your budget will allow.
- **What methodology will be used?** The person conducting the baseline will normally design detailed methodology. However, you should provide the broad outlines. Use some of the distinctions in the next section to help you think through the methodology.
- **Who will conduct it?** Projects frequently hire a consultant to conduct baseline studies. This can work well, but the project team must still dedicate sufficient resources to draft a clear terms of reference, manage the consultant, and read and understand the final report and data. Alternatively, the baseline could be conducted by project staff. This has the significant advantage that they will learn directly from the interviews, rather than relying on a report.
- **What is realistic?** Perhaps an ideal baseline would survey 500 small businesses, to provide baseline information for all your key indicators and project impact five years into the future. However, think carefully about what can really be achieved with the budget and time available. If you ask for too much, you run the real risk of not receiving any useful information.
- **What already exists?** Baselines can be very expensive, so every effort should be made to identify pre-existing data, and understand how that can be used for your own baselines. This avoids wasting money duplicating data collection.

#### 5) What data should be collected?

This section examines some key distinctions that will guide you in deciding what data needs to be collected. It does not provide technical detail; for more information, see the references at the end.

## 5.1) Primary/Secondary Data

**Primary data** is collected through the use of surveys, meetings, focus group discussions, interviews or other methods that involve direct contact with the respondents.

**Secondary data** is existing information that has been, or will be, collected by TMEA or others for another purpose. This may include reports from other organisations, data collected from partners, or previous TMEA studies.

The critical distinction between primary and secondary data is that primary data is collected by TMEA or partners specifically for the baseline study. Secondary data have been, or will be, collected for another original purpose. Primary data is considerably more expensive and time-consuming, so efforts must be made to establish what secondary data exists, and whether it can be used. Ensure value for money by using secondary data where possible.

However, primary data collection is often warranted. Although a review of secondary data sources should precede any primary data collection, existing data does not always provide the appropriate information in relation to the indicators you want to measure.. Secondary data may not be useful if the data is out of date, as the situation is likely to have changed.

## 5.2) Qualitative and Quantitative Data.<sup>1</sup>

**Quantitative data** measures the situation in numeric terms. It often uses closed-ended questions with limited potential responses, and employs statistical techniques to detect significant differences between different groups of respondents. It often requires large samples, weighted to represent the population that the study is interested in.

**Qualitative data** seeks to uncover the context, perceptions and quality of, as well as opinions about, a particular experience or condition. Data collection methods are likely to employ a more participatory approach through the use of open-ended questions that allow respondents to expand on their initial answers and lead the discussion towards issues that they find important. Samples tend to be smaller.

**Generally, both qualitative and quantitative data are required for a baseline.** Quantitative data measures the extent of a problem, and provide a simple understanding of how it has changed. It tells you what happened, when, and to whom. Qualitative data will supplement this by providing insights from partners, beneficiaries and staff, addressing the causes, sustainability, and impact of this change. This explains how and why things happen – which is particularly useful when addressing the question of attribution, whether your programme is responsible for the change that has occurs.

## 5.3) Possible sources of data

- Obtain existing and reliable data from past research or a literature review.
- Obtain existing and reliable information from partners. For example, the Revenue Authority might be able to tell you how long it takes to cross a border. This can be obtained and analysed directly, or as the responsibility of a consultant.
- Collect new information directly. If not already included in implementation plans, then this activity (and budget) needs to be included.

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<sup>1</sup> Some of this and the next section was taken from  
[http://documents.wfp.org/stellent/groups/public/documents/ko/mekb\\_module\\_10.pdf](http://documents.wfp.org/stellent/groups/public/documents/ko/mekb_module_10.pdf)

### Baseline Data for One Stop Border Posts (OSBPs)

OSBPs directly contribute to one of TMEA's key outcomes; a reduction in transport time for goods between East African countries. Consequently, it is essential to demonstrate a reduction in transport time following OSBP implementation. For this, it is necessary to establish a baseline – how long did it take to cross the border before the OSBP? – and compare it to the time at the end of the project.

The team is currently exploring a number of ways to collect this data, each with its own challenges. Data might be obtainable directly from the Revenue Authority; but this requires working with data from both sides of the border, which is not always comparable. Consultants can be contracted to conduct short, week-long baseline studies; but a week is not always long enough to get a reliable result. Longer surveys are more reliable, but also considerably more expensive. In the end, a combination of techniques will provide reliable baseline data at a reasonable cost.

#### 5.4) Retrospective and absent baselines<sup>2</sup>

The absence of a baseline is a common problem, and evaluators of programmes that have been running for some time may need to reconstruct a baseline. One way of doing this is by reviewing and analyzing historical data and secondary data. There may be limitations in this method. There may be no secondary data available or the secondary data may not sufficiently measure programme variables and potential impacts. An alternative method is using a technique called 'recall' through qualitative research with stakeholders. For a business regulatory reform programme for example, a sample of businesses and local authorities could be asked to recall their experiences of the regulatory procedure and associated costs.

Recall is potentially valuable but often an unreliable way to estimate conditions prior to the start of a programme. However, research evidence suggests that while estimates from recall are frequently biased, the direction and sometimes the magnitude of the bias is often predictable so that useable estimates can be obtained. The utility of recall can often be enhanced if two or more independent estimates can be triangulated.

Sometimes it will not be cost-effective or practical to collect baseline information against the indicator specified. In situations like this, the TMEA Director with responsibility for the project should prepare a brief qualitative description of what the situation is like from the information available and listing sources of data. For example, the PSO/CSO team found it impractical to collect baseline data against the indicator; percentage of advocacy issues raised by supported private sector and civil society organisations addressed by relevant organisations. Instead, the PSO/CSO Director has prepared a one page description based on a series of interviews with PSO and CSO organisations during the last quarter of 2010 and listed the names of the people/organisations met.

<sup>2</sup> From [http://www.ifc.org/ifcext/sme.nsf/AttachmentsByTitle/The+Monitoring+and+Evaluation+Handbook/\\$FILE/mandehandbook.pdf](http://www.ifc.org/ifcext/sme.nsf/AttachmentsByTitle/The+Monitoring+and+Evaluation+Handbook/$FILE/mandehandbook.pdf)

## 6) Using baseline information

In order to use baseline information, you need to:

- **Ensure that the methodology is clearly and carefully detailed**, including number of people interviewed, how they were selected, and how they were interviewed. You should also receive the full questionnaire used. This is important for all studies, but particularly baselines as it will be necessary for someone to use exactly the same methodology to complete the endline, to ensure comparability.
- **Get the raw data, in spreadsheet or database format**. This allows you to do your own analysis and check the consultants work. It will also allow more detailed comparisons to be made when the final survey is completed.

Once the baseline survey is completed, make sure you read and understand the report and data. This should include reviewing the raw data, and giving feedback to the consultant or project staff to improve the report as much as possible.

You will then need to incorporate baseline data into your monitoring plan, and ensure that you refer to it throughout your project to assess your progress against key indicators. Further studies must be conducted, either half way through the project or towards the end, in order to measure the outcome of the project. These need to use the same methodology and data collection tools as the baseline study, in order to ensure comparability.

There are a huge number of resources giving more information on baseline survey techniques and methodology. Three useful ones are:

- How to Plan a Baseline Study (WFP), download [here](#)
- The Monitoring and Evaluation Handbook for Business Environment Reform (IFC 2008) , download [here](#)
- Guidelines for Project Baseline Studies, by ASARECA, download [here](#).

Other TMEA resources include:

- TMEA MEL Guidelines
- How to Design a Results Chain
- How to Plan a Baseline
- How to Write Indicators
- How to Develop a Monitoring Plan