IMPACT MONITORING
AN INTRODUCTION

November 2012
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Introduction

About Danish Demining Group

Danish Demining Group (DDG) is a part of the Danish Refugee Council. As a non-profit organisation the Danish Refugee Council works worldwide to support and protect refugees, internally displaced and other conflict affected people.

DDG provides efficient and community oriented solutions to human security problems caused by landmines, unexploded ordnance, and small arms and light weapons.

At DDG we are committed to monitoring the impact of our interventions. If we are able to understand the changes our interventions bring about we can improve our performance to the benefit of the communities we support. It is therefore essential for us to assess the impact our activities have on the livelihoods and safety of local people.

The DDG approach to impact monitoring

Impact monitoring is an integrated part of all DDG operations. DDG’s impact monitoring system is managed by trained national staff in both our Armed Violence Reduction and Mine Action projects.

One of our key priorities is to involve the communities we support in measuring impact. Their knowledge, behaviour and opinions form the evidence on which we base our findings. When looking at impact we go beyond the square meters of land cleared and number of gun-locks fitted on small arms. Impact, to us, is about the changes in people’s lives that are generated from having a more secure home or access to safe land.

At DDG we continuously seek to improve our operations and the way we monitor our impact. Sharing knowledge and being transparent about methods enables us to receive feedback and develop our organisation. We collaborate with universities and research institutions on building evidence of the impact of Mine Action and Armed Violence Reduction projects.

An introduction to impact monitoring

The objective of this Introduction to Impact Monitoring handbook is to support field and HQ staff in DDG involved in the monitoring and evaluation of DDG projects. It is written as an easy to use and reader friendly introduction for staff with no or limited knowledge on how to monitor impact in DDG projects.

With this Introduction we do not aim to give a full account of all methods relevant to impact monitoring. Instead we will refer to the DRC intranet, INSITE, for additional information on key methods and assessment techniques.

This handbook is replacing the manual developed by DDG in 2009 as the reference point for impact monitoring. The results from our operations documented through impact monitoring can be downloaded from our homepage www.danishdemininggroup.dk.
Libya / Photo: Giorena Diffidenti, 2012
The impact monitoring process

1. We start with the objective of our project
Impact monitoring is about assessing the changes which our projects bring to the people we aim to support and the communities they live in. The change we want to achieve is linked to our project and programme objectives. Impact monitoring therefore starts with a review of our project’s logical framework. Section three of the handbook deals with this issue.

2. We establish a baseline
At DDG we use a ‘before and after’ design. We establish a baseline through either data we collect or, if available, through secondary data. We do this before or immediately after we have started our project. We do a follow up survey after the project has ended, which we call the impact assessment, as it often takes time for impact to materialise. We recommend waiting three to six months after the project has ended before following up on the baseline with an impact assessment.

3. We develop and use relevant indicators
Indicators are the central part of our monitoring system. How are you going to measure change in connection to our interventions? Indicators track the changes our projects bring about. Developing indicators will be looked at thoroughly in section four.

4. We collect data through a number of different sources and methods
At DDG we use a mixed method approach for data collection. We therefore always try to use both qualitative and quantitative methods. Which specific methods you should use depends on the type of indicator you have chosen, the context you work in and the resources you have available. As a minimum, impact assessment involves meeting with the beneficiaries and discussing their view of the changes that the project has brought. In section five we will look at the central aspects of choosing methods.

5. We use source and method triangulation to reach our findings
Section six will provide guidance on basic ways to analyse collected data. In short, we compare the changes in our indicators from the baseline to the impact assessment. Triangulation is central to the way we do our data analysis.

6. We use our findings to improve our projects
All DDG impact monitoring reports are written in a standard format. A report writing guide has been developed to accompany this standard format and can be found on the monitoring and evaluation page on INSITE. Our findings are used in our annual reviews and inform our strategy. Chapter seven will look at how impact monitoring is integrated into the project planning cycle at DDG.

7. We continuously train our staff in data collection and report writing
Building the capacity of our staff is central to what DDG wants to achieve with impact monitoring. Training manuals and other relevant guides can be found on INSITE.
Project design and impact monitoring

What is impact?

In DDG we define impact as:
Changes in people’s lives: opportunities or challenges that have come about as a consequence of activities carried out by DDG.

Impact monitoring is therefore about measuring change, the change that our projects bring to the people we try to support and the communities they live in.

Evaluation and impact assessment are two processes that are closely linked. As shown in table 1, impact assessment is often looking at more than the achievement of objectives, broadening the scope to include the positive and negative impacts of the project, whereas evaluation tends to focus on the achievement of objectives alone. Monitoring is a term defining the process of continuously following up on a project or programme, most often via indicators.

<table>
<thead>
<tr>
<th>Monitoring</th>
<th>Evaluation</th>
<th>Impact assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>A continuous process of collecting data on specified indicators.</td>
<td>Measures performance against objectives.</td>
<td>Assesses change in people’s lives – positive or negative – as a result of our work.</td>
</tr>
<tr>
<td>Is the project on track?</td>
<td>Are we reaching our objectives?</td>
<td>What has changed as a result of the project?</td>
</tr>
</tbody>
</table>

TABLE 1: Impact assessment

At DDG we understand impact monitoring as the process of continuously following up on the changes our projects bring about, intended or unintended.
Where to start when assessing change

Where do we start when we want to assess the change brought about by our projects?

If we want to know about the main changes our organisation aims to bring about we can take a look at our Assistance Framework in Figure 1 below.

The Assistance Framework describes the typical conflict scenarios that the DRC addresses: the Acute crisis scenario - the situation that individuals and communities find themselves in during and immediately after the outbreak of conflict; the Displacement scenario – covers individuals and communities that find themselves in protracted displacement situations; and finally, the Durable solutions scenario – which materialises when a conflict has come to an end but the weapons contamination problem still persists.

The Assistance Framework mentions three key objectives that guide our work and are of importance to impact monitoring, namely:

- Saving lives: This can be through the immediate removal of the threat of landmines, unexploded ordnance and small arms and light weapons.

- Restoration and development of livelihoods: This can be facilitated through improving conflict management skills, removing instruments used for violence and enabling safe access to natural and physical resources through mine clearance.
• Institutional and organisational change: This can be through training and capacity building of partner organisations and security providers, which contribute to the protection of peoples’ rights, safety and the peaceful handling of conflicts.

When we plan our projects we always have one or more of the above mentioned objectives stated as the change or impact we would like to see happen. We always aim, however, when we conduct impact monitoring, to also include measurements of the positive and/or negative changes that our project has brought about in people’s lives that may not be included in the objective statement of our projects.

Planning for change

When we plan our projects we try to plan for a certain change to happen. Using logic models is the most common way for development and humanitarian organisations to plan their projects. Figure 2 below outlines a standard logic model. It describes the inputs, activities and outputs that you need to reach a certain outcome and impact.

**FIGURE 2: Intervention logic**

• Inputs are the resources (e.g. money and time) that we put into a project.

• The activities define the processes in which these inputs are allocated (e.g. training, clearance, surveys etc.).

• The outputs are the tangible products from our project (e.g. square meters of land cleared, numbers of trainings held).

• Outcomes describe the use made of the outputs by the beneficiaries (e.g. improved conflict management due to conflict management education of communities).

• Impact describes the effects of the use of outputs by beneficiaries or, in other words, the consequences of the outcomes (e.g. fewer conflicts in the local communities).
Activities and outputs are what keep us busy in our day-to-day running of projects. But it is the outcomes and impact that create the changes in people's lives. For two standard examples of the intervention logic in MA and AVR DDG projects, look at figure 3 below.

When humanitarian organisations describe their project intervention logic they most often use what is called a logical framework. Since the early 1990s, the logical framework approach has been the dominant way to present the intervention logic of projects. Having a basic understanding of how to read a logical framework is therefore central to the impact monitoring process in DDG. Box 1 depicts a standard logical framework. On INSITE you can find more on the logical framework approach.
The logical framework

<table>
<thead>
<tr>
<th>Intervention logic</th>
<th>Indicators</th>
<th>Sources of verification</th>
<th>Assumptions</th>
</tr>
</thead>
</table>
| Overall objective  | Impact indicators | National level statistics  
 DDG impact monitoring | Assumptions from outcome to impact |
| Immediate objective| Outcome indicators | DDG impact monitoring  
 Assessments from other actors | |
| Outputs            | Output indicators | Operations reports | Assumptions from output to outcome |
| Activities         |             |                         |             |
| Inputs             |             |                         |             |

- Overall objective: The long-term effect which the project is expected to contribute – links to national strategies and donor objectives. The country specific millennium development goals can often be seen in logical frameworks on the overall objective level. An important point is that as a project operator we are not expected to be responsible for the achievement of the overall objective. But we contribute to it. The OECD DAC definition of development objective is ‘intended impact contributing to physical, financial, institutional, social, environmental, or other benefits to a society, community, or group of people via one or more development interventions’. It is at this level we set impact indicators.

- Immediate objective: What we can expect to be in place, with a high degree of certainty, if the project has been successfully implemented. It is the solution to the problem that our project is addressing and is the objective that our outcome indicators are referring to. More importantly, the immediate objective should state what changes the beneficiaries will experience.

- Outputs: The specific products created by the project’s activities. This is what we budget for in our proposals. This is the number of workshops, trainings, square meters of released land, number of items destroyed, and so forth. Output indicators are used to measure the change in outputs, and they are the simplest indicators to establish, as our next section will show.

- Inputs: The human, material and financial resources that must be channeled to a project in order to deliver its outputs.

- Indicators: Quantitative or qualitative factors or variables that provide a simple and reliable means to measure achievement and to reflect the changes connected to an intervention.

- Sources of verification: Documents or data that can provide evidence on the changes in the indicators, such as our impact monitoring reports or reports from other NGOs or national institutions.

- Assumptions: Hypotheses about factors or risks which could affect the progress or success of an intervention.

The terminology that donors use in their respective logical frameworks will vary. Some might use goal, purpose or results. In DRC and DDG we follow the specific donor’s terminology when we report. For the ease of reading we will in this handbook and other related guides use the terminology overall objective, immediate objective, or simply objectives, when referring to both levels of objectives in the intervention logic.

It is important to remember that we are interested in capturing both negative and positive changes that have occurred as a consequence of our intervention. So even though the objectives of our projects are often described as positive changes we need to keep our eyes and ears open to the negative effects our work might have had.

BOX 1: The logical framework
When embarking on impact monitoring the logical framework of your project should therefore be your starting point. However, in reality change is not a linear process and we are not able to control the outcomes of our projects to the same degree as we can control the outputs.

For example, as an organisation, we can control and budget for the numbers of trainings we conduct, the numbers of mines we destroy and the numbers of square meters land we release. On the other hand, we cannot ensure that all the released land is used productively as we do not control the factors that will enable the local people to use the land, such as land rights and water resources. Furthermore, there can be unintended negative consequences of our work such as conflicts arising over newly released land.

Therefore, while the objectives in the logical framework can be a guide and a starting point for us when carrying out impact monitoring, it is important for us to look beyond the planned objectives when assessing the changes that have happened in the communities in which we work.
Using indicators

Indicators are at the core of the DDG impact monitoring system. When measuring change against indicators we get an indication of whether or not our project has had an impact, be it positive or negative. The sole role of an indicator is thus to track whether a change has happened.

Types of indicators

There are different types of indicators, including: input, process, output, outcome and impact indicators. As you can see from figure 5, the indicators all refer to a particular stage of the intervention logic.

[Diagram showing different types of indicators]

Outcome and impact indicators are often called change indicators. Change indicators track whether any changes have happened in the lives of the beneficiaries. Input, process and output indicators are often called output indicators and mainly focus on how much our project has spent (input) or how much the project has produced (output e.g. square meters of land released).

[Diagram showing output indicators and change indicators]

With reference to figure 6, the outcome and impact indicators are the most central to impact monitoring as they tell us about the changes in people’s lives, such as: what has been the result of the safety planning training? What use is made of the released land?
Selecting indicators

When selecting indicators for impact monitoring there are three steps you can take. The first is to revisit the project log frame – normally there will be two or three indicators at the immediate objective level which you should use in your impact monitoring, have a look at box 1. Secondly, you can use the DDG indicator reference list to select a number of relevant indicators. Thirdly, you can develop more indicators with your staff and the target communities. There are a number of different ways to do this, the most common way is to develop indicators when you develop your project logical framework. Preferably the local community you are working in should be involved in developing and testing the indicators. You can read more on this process on INSITE.

Below is the DDG guide to selecting indicators.

- The starting point for selecting indicators is the logical framework for the project you are collecting baseline or impact assessment data on. Use the outcome and impact indicators.

- If necessary, select more indicators from the DDG indicator reference list or develop new indicators. Up to five indicators per objective is recommended.

- Indicators need to be relevant at the local level. This means that the indicators we choose have to make sense to the people we are trying to support. It can therefore be useful to use community liaison visits or need assessments done prior to the project design to help develop indicators.

- Ensure that your indicators are sensitive to the age, gender and diversity of ethnic groups within the communities in which you work.

- Indicators should be reviewed after collecting the baseline data. Are the indicators relevant? Can you collect the data needed to demonstrate change, and will you be able follow up on it?

Finally, try to consider the following questions when selecting indicators:

- Valid – Does the indicator directly represent the change it is intended to measure? Is the change within the scope of the project?

- Objective – Is the definition precise, simple and unambiguous about what is to be measured?

- Reliable – Is the data needed to measure the indicator consistent or comparable over time?

- Practical – Can data be collected easily, on a timely basis and at reasonable costs?

- Useful – Will the indicator data be useful for programme decision-making and learning?

- Owned – Do the local communities and programme management agree that this indicator makes sense?

Below in table 2 are a number of DDG reference indicators. You can find the full list of DDG impact monitoring reference indicators on the workroom on INSITE.
### Objective

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Evidence to collect at baseline and impact assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in productive use of released land</td>
<td></td>
</tr>
<tr>
<td>Changes in use of released land</td>
<td>Describe current and former use of land</td>
</tr>
<tr>
<td>Amount of released land brought into productive use e.g. housing or agriculture and grazing land</td>
<td>Estimate the percentage of different land uses (e.g. 25% agriculture, 30% housing, 10% infrastructure (roads), 20% unused etc.)</td>
</tr>
<tr>
<td>Number of men and women benefiting from released land</td>
<td>Estimate number of men and women benefiting from targeted land</td>
</tr>
<tr>
<td>Enable resettlement and return</td>
<td></td>
</tr>
<tr>
<td>Number of men and women resettled on released land</td>
<td>Describe current and former population in terms of IDP, refugee and host population</td>
</tr>
<tr>
<td>Number of refugees and / or IDPs returning to communities benefiting from mine action</td>
<td></td>
</tr>
<tr>
<td>Improve access to markets and natural resources</td>
<td></td>
</tr>
<tr>
<td>Changes in infrastructure</td>
<td>Estimate meters to market, main road, cultural important buildings</td>
</tr>
<tr>
<td>Meters to market, main road, cultural important buildings...</td>
<td>Estimate time spent on collecting water</td>
</tr>
<tr>
<td>Time spent on collecting water</td>
<td>Estimate the number of potential users of infrastructure (e.g. users of roads, schools etc.)</td>
</tr>
<tr>
<td>Number of potential users, men and women</td>
<td></td>
</tr>
<tr>
<td>Do no harm</td>
<td></td>
</tr>
<tr>
<td>Changes in the number of conflicts over land</td>
<td>Describe the situation e.g. the number of and nature of conflicts over land in the target area</td>
</tr>
<tr>
<td>Level of equal participation in decision making over use of released land</td>
<td>Describe the decision making process focusing both on men and women</td>
</tr>
<tr>
<td>Reduced violence and conflict</td>
<td></td>
</tr>
<tr>
<td>Number of people who have had a violent encounter</td>
<td>Estimate the ratio of violent encounters e.g. in the past twelve months</td>
</tr>
<tr>
<td>Men, women and children’s perceptions of the level of armed violence</td>
<td>Perceived level of armed violence amongst the people today</td>
</tr>
<tr>
<td>Reduced threats from explosive remnants of war</td>
<td></td>
</tr>
<tr>
<td>Number of accidents (human and domestic animals)</td>
<td>Number of accidents, men, women, children, animals</td>
</tr>
<tr>
<td>Number of people who worry about accidents with mines or remnants of war (feeling of safety)</td>
<td>Number of people who say they worry about accidents with mines or remnants of war</td>
</tr>
<tr>
<td>Level of knowledge on mine risks among the population</td>
<td>Estimate awareness of mines and UXO in the population, disaggregate by gender and age</td>
</tr>
<tr>
<td>Number of identified private owners of explosive remnants of war</td>
<td>Estimate number of identified private owners of explosive remnants of war</td>
</tr>
<tr>
<td>Improved security provision and conflict management</td>
<td></td>
</tr>
<tr>
<td>Level of trust in policy</td>
<td>Measure community willingness to report incidents of armed violence to police</td>
</tr>
<tr>
<td>Change in the percentage of people willing to report incidents of armed violence</td>
<td>Number of local initiatives to counter armed violence</td>
</tr>
<tr>
<td>Formation of local strategies for armed violence prevention and reduction</td>
<td></td>
</tr>
<tr>
<td>Reduced treats from SALW</td>
<td></td>
</tr>
<tr>
<td>Number of firearm related accidents</td>
<td>Estimate number of firearm related accidents</td>
</tr>
<tr>
<td>Percentage of people who say they worry about firearms</td>
<td></td>
</tr>
</tbody>
</table>
Methods for data collection

There is never only one single data source for your indicator and there is never only one method to collect the data. DDG does not want to dictate a specific method or data source that you should use. Rather we have a framework that can guide you on the minimum requirements for what makes up the DDG approach to impact monitoring data collection.

- We use indicators as the starting point in our data collection and our reporting. We use the same indicators for our baseline and our impact assessment.
- We use a before-and-after design. We establish a baseline before project start and follow up with an impact assessment after our project intervention has ended.
- When collecting baseline data we try to establish how the situation is in the target area at the moment the project starts. We might need to know how many square meters of safe land people have access to and what they use the land for. When we do our impact assessment after the intervention has ended we follow up on the same indicators. We do this to be able to assess the changes that have come about as a result of our project intervention. We do not need to collect the baseline and impact assessment data ourselves if it can be obtained from another organisation or institute, but we should always try to gain the opinion of the local population.
- We use a mixed method approach. We combine different data sources (e.g. beneficiaries, national authorities and experts) with different data collection methods (e.g. interviews, questionnaires and maps).

Data sources

There are numerous data sources you can use for impact monitoring, some of the most common are:

- Beneficiaries
- Authorities
- NGOs
- Reports, surveys and assessments
- Maps and pictures

Before choosing your data source there are a number of key issues you want to consider:

- Can the source provide you with the relevant data for your indicator?
- Do we need to collect the data ourselves or can we use secondary data sources? There is no need for us to generate our own data if the data we need is already collected.
- Collect only data that you are going to use. And collect only information that is relevant for your indicators.
- Do your data sources adequately represent the beneficiaries of the project? Are women, children and vulnerable groups included as sources of data?
Data types

Data can generally be broken down into two categories: qualitative and quantitative. These two types of data have different uses and can give us different kinds of information.

Quantitative data is useful for giving us numerical data (numbers and figures) and answers to questions related to what, how many, where etc. Hence, quantitative data is good at providing evidence from which generalisations with statistical confidence can be made e.g. x number of women in the village now use the released land to grow wheat. Or x number of people that have participated in the conflict management training are now acting as conflict mediators in their communities.

Qualitative data is good at providing us with a deeper understanding of a particular group’s (men, women, children, elders, farmers etc.) perception of a social process (e.g. how and why a conflict started, or why a certain field is not being used). Qualitative data can give us a better understanding of the processes and trends that are evident from our questionnaire survey data.

At DDG we always try to use both qualitative and quantitative data. Qualitative data collection methods, such as interviews and focus group discussions, explore why certain attitudes or behaviour prevail and quantitative data collection methods, such as a questionnaire survey, can help explain what has happened in the form of a number or percentage.

In figure 7 it is demonstrated how qualitative and quantitative methods can compliment each other.

<table>
<thead>
<tr>
<th>From qualitative data collection to quantitative</th>
<th>From quantitative data collection to qualitative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use information from your focus group discussion to create questions for your questionnaire in order to generalise perceptions and opinions that have come out in the discussion e.g. you can understand from your focus group discussions that the young men that have been trained in conflict management now feel that there is a better relationship between the project’s target communities: how many community members feel that the relationship between communities has improved?</td>
<td>Use the information from surveys to pose questions to focus groups e.g. you can see from your survey data that women are much more positive about the benefits of mine clearance than men are, why is that?</td>
</tr>
<tr>
<td>From the specific to the general</td>
<td>From the general to the specific</td>
</tr>
</tbody>
</table>

FIGURE 7: Qualitative and quantitative data collection
Data collection methods

There are many different methods you can use to collect data. Below are the ones most commonly used in DDG.

- (Key informant) interviews
- Field visit and observation
- Focus group discussions
- Questionnaires
- Secondary data collection

Another set of methods that we use is participatory methods (e.g. most significant change technique, participatory rural appraisal etc.). This Introduction to Impact Monitoring does not deal with this method but you can find manuals pertaining to it on INSITE.

The following section will give a brief introduction to the methods most commonly used by DDG and come up with recommendations for their use. On INSITE you can access more information on the data collection methods presented below.

Secondary data collection

Secondary data is data that is not collected by DDG. If data relevant to our indicators is already collected by other organisations we should try to use that instead of collecting the data ourselves. It is important we document what the source of the data is and how it was collected. It is also important that we remember to consider data already collected by DDG or DRC in the form of need assessments or non-technical surveys.

Things to remember with secondary data:

- Avoid getting data overloaded. Collect only data relevant to your indicators.
- It can be challenging to assess validity. Stick to well-known sources e.g. see the list of resources on INSITE.

Observation

At DDG, we carry out observation frequently. We use it when we enter a community and when we conduct mapping. Observation is seeing and reflecting on the way people live and behave in relation to the aspects that are relevant for our intervention. This might be to observe how duty bearers (police, chiefs) behave or relate to right holders (internally displaced, farmers etc.). Observation is a good way of confirming whether what people say in interviews is also what they practise in their day-to-day lives (e.g. is the land being used? Do they practise safer behaviour?).

Things to remember with observation:

- Remember to document the observations you make by taking notes and writing field visit reports
- Go for a walk. Let people show you the field or other areas of importance to them
- If considered acceptable by the beneficiaries, take pictures
Focus groups

A focus group is a gathering of around six to twelve people discussing a topic that is relevant to them. We can, for example, talk to men about using gun-locks or women about providing food for the family, but we can also do mixed groups to understand how views differ on certain topics e.g. how safety is felt. Focus groups are good at gaining a deeper understanding of social processes or a specific topic. The ‘why’ questions are what we pose in focus group discussions. Why is the land not being used? Why have people become better at handling conflicts?

Focus groups are particularly good at:

- Looking at how opinions and perceptions differ between social groups (gender, age, diversity)
- Probing on the gap between what people say and do
- Getting feedback and facilitating interaction between DDG staff and the communities

Things to remember with focus groups:

- It takes time and resources to handle and analyse data from focus group discussions
- When preparing a focus group discussion relevant questions should be prepared beforehand. Do not replicate questions from the questionnaires, rather, ask what processes in the community do we not understand and would like to have a deeper understanding of? If possible, the questionnaire survey can be conducted before the focus group discussion and this way the focus group discussion can be used to probe on questions that have emerged as a result of the questionnaire survey
- It is important to take extensive minutes from the focus group discussion to enable analysis. Write them down in a word document immediately after the focus group discussion
- Is there a particular issue we want to know more about and are the participants relevant for this focus? Focus groups can give us in-depth knowledge on social processes (why has the land not been used? Why is there more trust to the police?)
- When presenting data from focus groups it is about describing processes and explaining reasons behind actions and not simply presenting numbers, percentages and figures
- There are examples of questions for focus groups on INSITE

Interviews

Interviews can be both structured (with a set of questions), semi-structured (with a set of interview topics) or unstructured (where there is maybe only on or two overall questions). Interviews are particularly good at:

- Getting beneficiaries to describe their lives in their own words
- Getting thick, in-depth information on single subjects
Things to remember with interviews:

- They take time. Make use of a semi-structured interview guide to make sure you remember to ask the relevant questions.

- A key informant is a person that has valuable insights or knowledge on a topic that is particularly relevant for our assessment. It can be an expert, an elder or a child that has experience with the issues we are looking into.

- When interviewing, remember to choose an appropriate interview location (e.g. a location away from the sun, if hot, and somewhere the informant feels relaxed).

- Be sensitive to cultural considerations: there may be some questions you cannot ask. Always test your questions on staff with local knowledge.

- Listen to all that respondents have to say.

**Questionnaire**

Questionnaires are particularly good at:

- Collecting numerical data: numbers and figures for basic information such as age, gender etc.

- Looking into what is general in the communities – make generalisations with statistical confidence from the responses.

- Producing data that is quantifiable.

Things to remember about questionnaires:

- It takes time to develop a questionnaire. Asking the right questions in the right way is a difficult exercise.

- Sampling is needed. Remember to document in your report how you chose your survey participants (your sample). Refer to box 2 below.

- It is difficult to design good survey questions if the beneficiary’s way of life is not well understood.

- Respondents may have a low tolerance of surveys.

On developing questions:

- Avoid double-barreled questions (questions that ask about two or more concepts at the same time). For example, the question “When there is violence in your village, do you feel scared or insecure?” is double-barreled because it asks the respondent about two different emotions. If the respondent were to answer “yes” to this question, we would not know if they felt scared, insecure, or both. Therefore, as a rule of thumb, survey questions should only ask about one concept or idea at a time.

- Avoid loaded questions. Loaded questions are biased and can potentially lead the respondent to answer in a certain way. The question “Do you think owning SALW is dangerous?” is loaded because it places a value judgment on owning SALW and the respondent may feel pressured to answer according to this value. Instead, “What do you think about people in your village owning SALW?” is a more suitable question because it allows the respondent to answer according to their own values.
• Keep surveys short and simple: Respondents are less likely to complete, or even begin, long surveys.

• Question order: The order in which questions appear in a survey is very important. Surveys should begin with basic questions first (e.g. questions about gender, age, ethnicity, etc.) and then move to more personal or controversial questions towards the end. Placing personal or controversial questions at the beginning of a questionnaire can deter respondents from continuing the survey.

Test your survey: Once your survey has been developed, it is always a good idea to test it out on your colleagues, friends, or family members. Testing your survey will allow you to get feedback on how long it takes to complete the survey, the clarity of the questions, and how well respondents comprehended the questions.

When we conduct questionnaire surveys we need to consider which respondents to include in the survey. This is called sampling and is described in more detail in box 2 below.

**Sampling**

When we collect data it is often not possible for us to talk to everyone in the community. Therefore, to still be able to say something about the whole community, we choose to do a ‘snapshot’, a sample, of a population.

**Who should we include in our questionnaire survey?**

The people we include in our surveys are the people who are targeted to directly or indirectly benefit from our project (communities using the land released from mine, UXO or battle area clearance, or a community receiving conflict management education).

Often we may not have a precise number of the local population but we can use an estimate from a village or community leader and compare it with other reports we might have access to, and from there make an estimate.

To ensure representativeness of the survey findings we try having our sample reflect the composition of the population in the communities we work in. We can do this by systematic selecting to conduct interviews in different areas in the community and, more importantly, by ensuring to include a representative proportion of respondents representing different social groups: ethnicities, men, women, children, adults and elders.

**Types of sampling**

There are two general ways to approach sampling: probability sampling and non-probability sampling.

Probability sampling can be done when you are able to give everyone living in your target area, e.g. your sample frame, an equal chance of participating in the survey by, for instance, listing everyone’s names and drawing lots. In many of the places in which we work it is unlikely that we will be able to carry out probability sampling as we will not have knowledge of the total population number or its physical distribution. Therefore, we most often carry out non-probability sample or purposive sampling.

A common way of carrying out non-probability sampling in DDG is to walk around amongst the target population and choose to speak to an individual from every second/third/fourth/fifth house or household (depending on the size and context in which you are working).

**How many should you include?**

It is never clear-cut precisely how many individuals you should include in your sample. The decision-making process behind how many individuals to speak to is subjective and often determined in part by time and resources. As a guide you can use one of the many survey calculators on the internet http://www.custominsight.com/articles/random-sample-calculator.asp. We recommend you set error level at 5% and use 95% confidence level. If you are doing a survey in a difficult context e.g. an emergency it is accepted to lower the confidence level.
### Linking indicators and data collection methods

In Table 3 below you can see an example of how different methods can be used to collect data for different indicators. You can use a table like this to plan your baseline and impact assessment data collection.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Indicator</th>
<th>Examples of data collection method &amp; data sources</th>
<th>Data collection considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>To contribute to the safe return process of Internally Displaced Persons</td>
<td>Number of people resettled on released land</td>
<td>Secondary data collection: Statistics on numbers of people returned, Observation from field visits, Key informant interview with local village head</td>
<td>Official data may be difficult to get, but UNHCR is a good source to use. Consider taking photos of target areas before and after the project intervention. Remember a key informant can be someone other than the village head. It can be a local expert or shop owner. It all depends on the indicators.</td>
</tr>
<tr>
<td></td>
<td>Changes in land use of targeted land</td>
<td>Secondary data collection: Areal photos of the cleared land before and after clearance, Questionnaire survey on the population with access to released land, Key informant interview with local agricultural expert</td>
<td>Remember to consider how you choose your sample. Interviewing farmers using the released land vs. community members not using the land will give you very different information.</td>
</tr>
<tr>
<td>To provide a safe environment for communities.</td>
<td>Level of violence in community</td>
<td>Questionnaire survey of targeted communities on perceived level of violence, Secondary data from police or NGOs on the incidence level, Key informant interview with village nurse</td>
<td>Using different sources such as the police and the local clinic can help us get a clearer picture of the changes that have happened in the community.</td>
</tr>
</tbody>
</table>

**Table 3: Linking indicators and data collection methods**

### General considerations

It is important to consider issues of confidentiality and anonymity with regard to collecting data. When you first introduce yourself and Danish Demining Group to your informants it is imperative that you highlight that all information they share with you will be treated confidentially and will be made anonymous. The issue of whether you should make note of informants’ personal details, e.g. name and house/household number or location, is context specific. In some places it can be regarded as rude and offensive if you don’t make note of your informant’s name, and might even make your research lose its integrity in their eyes, whereas in other cases it can be met with skepticism and reservation. Making a note of informants’ personal details can help transfer a sense of ownership in the process of data collection – many people enjoy and take pride in having their voices heard.
– and can be very useful if a follow-up study is carried out as it will allow you to revisit the same informants and track the changes in their lives. In places where security is an issue of great concern it might not be advisable.

The important thing is to gauge what is appropriate through your understanding of both the general context and the views of the individual informant – never force an informant into sharing information with you that they don’t feel comfortable with. Ultimately, it is important to remember and highlight the distinction that if data is not made anonymous at the point of collection it will be made anonymous at the point of dissemination.
Data handling and analysis

From the moment that you start your data collection you need to start thinking about how to handle and analyse it.

The purpose of analysis is to make sense of the data you have collected. Analysis enables you to transform data into evidence of the impact of your intervention. Typically, this process involves three steps:

- Handling the data for analysis, i.e. data preparation
- Describing and categorising the data
- Interpreting the data, e.g. assessing the findings against indicators

Data handling

Data handling is about storing and organising the data you have collected to make it easier to use when you do your analysis.

Handling your questionnaire survey data is often done by using a simple excel spreadsheet or a database and analysis system such as SPSS. In the impact monitoring workroom on INSITE you can find guidelines on how to handle your survey data.

Handling qualitative data from interviews and focus groups can be a bit more demanding. But for both types of data the important thing is to get data typed into the system you want to store it in as soon as possible after you collected it.

For qualitative data this process involves transcribing the notes or the tape-recordings of the interviews you have done.

Data analysis

Analysing data is firstly done by organising the collected data in reference to the chosen indicators. You should try to answer the question: what changes does the data collected indicate?

Analysing your survey data is most often done in either excel or an analysis tool like SPSS. In the impact monitoring workroom on INSITE you can find guidelines on how to handle your survey data.

Analysing qualitative data is often an unstructured process of going back and forth between different data sources, looking for trends or contradictions. To many, it is a cognitive process not easily described. There are some clear steps you can take to help you along the way, however:

The first step is to look at the information you have gathered from key information interviews, observations or focus group discussions, as mentioned above on data handling.

Arrange the information according to which indicator it is relevant for. This is called coding. In this way you can go through your data looking for information that is relevant to a specific indicator and pair it: highlight the information on paper with a pen and give the indicators different letters or numbers. This process of coding your data can be used for all types of data: maps, survey data, secondary data and interview data.
With your data coded and categorised you now know what information is relevant for which indicators. You can now start looking at what information other secondary data sources can provide on the indicators.

With all your data organised according to the indicators, you can now start building your evidence by going through the data and seeing if there are any trends (e.g. topics on which the data gives similar results) or places where the data contradict each other. Both instances are equally important. If we find contradictory evidence we know that there is something we either don’t know enough about or there is a difference of opinion or perception among our data sources. This is the interesting aspect of data analysis!

Using your baseline, go through this same process by comparing findings from the baseline with data from the impact assessment, with reference to specific indicators, and again look for trends and contradictions.

Table 4, seen below, can be used to structure your data analysis. Note that this framework links to DDG’s standard reporting format, which is on INSITE. By using the table below when analysing your data you have already started the process of writing your report.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Indicator</th>
<th>Sources</th>
<th>Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>To contribute to the safe return process of Internally Displaced Persons</td>
<td>Number of people resettled on released land</td>
<td>Secondary data: Statistics on numbers of people returned, Observation from field visits, Key informant interview with local village head</td>
<td>Official data from UNHCR is confirmed by both field visit and interview with x on the...etc.</td>
</tr>
<tr>
<td></td>
<td>Changes in land use of targeted land</td>
<td>Areal photos of the cleared land before and after clearance, Questionnaire survey on the population with access to released land, Key informant interview with local agricultural expert</td>
<td>Areal photos of the released shows that approximately 65% of the released land is now under cultivation. The survey shows that approximately 45% of the community x accesses the land and uses it for wheat growing. Agricultural expert Mr. x explained that the land is not used due to...etc.</td>
</tr>
<tr>
<td>To provide a safe environment for communities.</td>
<td>Level of violence in community</td>
<td>Questionnaire survey of targeted communities on perceived level of violence, Secondary data from police or NGOs on the incidence level, Key informant interviews with village nurse</td>
<td>The perception from the local community is that the level of violence has dropped in the period from x to x. However this is not confirmed by reports from the police or local NGO. This might be that not all incidences are recorded as local nurse Mrs x explained the number of patients from gun violence had dropped...etc.</td>
</tr>
<tr>
<td></td>
<td>Number of privately owned small arms and explosive remnants of war</td>
<td>Questionnaire survey of targeted communities, Secondary data from police or NGOs, Key informant interviews with the local clan leader</td>
<td>Compared to the baseline from x the number of firearms reported through the questionnaire survey has dropped by 234 items (equal to 45%). This is supported by the handover statistics from the police. Local clan leader x is also of this opinion...etc.</td>
</tr>
</tbody>
</table>
Final considerations on data handling and analysis

If you have gone through the steps described above and shown in table 4 you have been triangulating your data. Triangulation is the use of three or more sources or types of information to verify and substantiate an assessment.

Triangulation is a way for us to cross check our data by, for example, making sure that the changes our data indicate are not just the opinion of a single person or group.

In figure 8 it is demonstrated how we may use our data to triangulate the evidence on changes in use of land released by our project. It should be noted that one way to build triangulation into your impact assessment design is to develop indicators that are complimentary.

![Source triangulation diagram]

Triangulation is also important for addressing the issue of attribution. Dealing with attribution implies determining whether changes observed are caused by our intervention or by other factors. It is easy to see a change in a community and assume it is due to our intervention but there may have been other contributing factors.

Analysis and triangulation is thus necessary for not only building evidence for the changes that have taken place in a certain area or community, but also for us to establish whether or not these changes have anything to do with our project.

In an attempt to determine attribution we can make sure that we have a rigorous impact monitoring design by doing the following:

- Establishing a baseline
- Using appropriate methods (different methods generate different information)
- Using a mixed method approach. Try to understand both what has happened and also why something has happened
- Making sure that we triangulate our data

The next and final section will look at how we use our findings.
Using findings

Presenting the impact monitoring data in an easily readable way is the first step in making use of your findings. We have a standard reporting format and a report writing guide on INSITE. The next step is to use the findings from the impact monitoring report in our strategy development, planning and communication.

Impact monitoring and project and programme management process in DDG

Findings from impact monitoring can give directions as to how we can improve our programming to mitigate negative effects or enhance the positive effects of our projects.

To be able to use impact monitoring to improve programming in DDG each programme should link the impact monitoring process to the strategic planning process of the programme. In this way, lessons learned from the impact of the project will feed into our programme and improve our intervention’s impact to the benefit of the local communities.

As figure 9, seen below, shows, there are two key documents, one at programme level and one at project level. The latter is the logical framework that gives us an idea of the impact the project hopes to achieve through the overall and immediate objectives. The former is the strategic planning document which sets out the strategic directions of the programme for a three year period. Linked to these two key documents are two key internal DDG processes: impact monitoring focusing on the impact of our projects with reference to the logical framework, and the annual review which assesses the programme towards the goals set out in the strategic programme document (SPD).

<table>
<thead>
<tr>
<th>Management level</th>
<th>Key management documents</th>
<th>Key strategic learning events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programme</td>
<td>Strategic programme document (SPD)</td>
<td>Annual Review</td>
</tr>
<tr>
<td>Project</td>
<td>Project proposal and the logical framework (LFA)</td>
<td>Impact monitoring</td>
</tr>
</tbody>
</table>

FIGURE 9: Linking impact monitoring and programme management in DDG
Figure 10 outlines how impact monitoring can inform both programme and project level planning in DDG.

There are four steps we can follow when using impact monitoring to improve our programming:

- When we develop our projects they should be informed by our strategy and the objectives of our strategy. At the project level we develop indicators that track the change the project brings about at a local level.
- We use these same indicators when we carry out impact monitoring.
- The findings from the impact monitoring process feed into the annual review process.
- At the time of the annual review the impact monitoring report's findings and recommendations should be taken into account when revisiting and revising the SPD.
Planning impact monitoring

It is recommended that the planning of impact monitoring is integrated into the programmes annual plans, so that it is clear for both project and programme management when and where baselines and impact assessments need to be conducted. The annual plan should be informed by the project plan (e.g. gant chart) and a suitable timing for the baseline and impact assessment should be planned as shown in figure 11.

<table>
<thead>
<tr>
<th>Management level</th>
<th>Planning documents</th>
<th>Responsible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Programme</td>
<td>Annual plan</td>
<td>County director and M&amp;E or Impact monitoring officer</td>
</tr>
<tr>
<td>Project</td>
<td>Project activity plan and/or gant chart</td>
<td>Project officer</td>
</tr>
</tbody>
</table>

Other ways to use the findings are to:

- Provide data for reports to donors
- Provide data for new proposals
- Provide data for articles for public information
- Provide impact data for the DRC Grants Management System (GMS). In the indicator reference list it is noted which indicators should be reported on for the GMS
- Share the information with other organisations. This is important to avoid duplication of data collection in the same communities

Finally, it is essential that we give feedback to the communities in which we work. Set up a community meeting and present your findings. This might also be one of the best ways to test if your analysis is seen as reflecting what is happening in the communities we are aiming to support. It is therefore a good idea to give feedback to the communities before finalising your report.