IDENTIFYING AND DEFINING INDICATORS

Detailed Guidelines

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1. INDICATORS

1.1 Why is this manual important?
The purpose of this technical manual is to explain key concepts and provide guidance on identifying indicators (including selecting and developing), as well as defining indicators (including how to calculate and analyse them). More specifically, it will support you in:

- Using indicators as part of your work in developing and designing project and country strategies, as well as part of a broader Monitoring, Evaluation, Research and Learning (MERL) process;
- Selecting appropriate indicators from the Plan International indicator architecture;
- Developing appropriate indicators when required;
- Integrating donor indicator requirements when necessary;
- Assessing the quality of indicators and sets of indicators; as well as
- Defining how to calculate and analyse indicators.

1.2 Who is this manual intended for?
This technical manual is intended for anyone involved in developing and implementing results frameworks and M&E Frameworks – whether this be at the project, programme, or strategy level. This includes:

- M&E Managers, Coordinators and Officers,
- Business Development and Grant Management staff,
- Technical staff,
- Project Managers, Project Officers and broader Project Teams, and
- Implementing partners,
in Country Offices (COs), National Organisations (NOs), Regional Hubs (RH) and Global Hub (GH).

For more learning material on selecting, developing, calculating and analysing indicators, refer to:

- E-Learning Module
- Face-to-Face Training Package – including PPT slides and Training Agenda and Teaching Notes.

2. INDICATORS: THE FUNDAMENTALS

2.1 What is an indicator?

Plan International defines indicators as specific measurements that will show progress against planned results, achievement of objectives, quality of approaches and relationships as well as progress in the use of allocated funds.

The trick is to find specific measurements that are the most relevant, well defined and of good quality so that data can be systematically collected, calculated and analysed to provide adequate and appropriate evidence to inform decision making.

2.2 Why do we need indicators?
Project management is not just about managing the implementation of planned activities. It is also about monitoring progress towards intended results at all levels (outputs and outcomes, in particular) and if needed, readjusting the intervention so that activities lead to intended results. This means regularly and systematically asking ourselves:

- Are we on the right track?
- How do we know we are on the right track?

To answer these questions in a rational and objective way, we rely on evidence – relevant, reliable and timely data and information.

Well thought out and defined indicators as part of M&E Frameworks are fundamental tools that provide such evidence and measurements. When meaningfully and adequately selected or
identified, defined, collected, calculated and analysed, indicators provide evidence to help understand whether implementation is on the right track, whether the assumptions we made during design are holding true, and whether activities are effectively leading to the planned results.

Therefore, indicators must have a clear and direct link with the category of information that is sought as we should not be measuring indicators for the sake of having data. But that the data we collect should be targeted to directly respond to our information needs.

2.3 What are the different categories of indicators?
Plan International M&E indicators can be grouped in three categories.

<table>
<thead>
<tr>
<th>Category</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outputs indicators</td>
<td>Specific measurements that will show progress against the achievement of the immediate results of activities</td>
<td>Number of parents completing awareness raising training with basic knowledge;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of youth clubs established;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number safe spaces built in line with international standards.</td>
</tr>
<tr>
<td>Outcomes indicators</td>
<td>Measurements of the specific changes among the target groups, stakeholders and institutions</td>
<td>% of girls and boys in schools who are aware of the right of every child to a quality education;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Level of empowerment reported by young people.</td>
</tr>
<tr>
<td>Impact indicators</td>
<td>Measurements of the long-term and sustainable change the project is contributing to</td>
<td>Proportional mortality ratio of girls and boys under five;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Extent of women’s participation to civil society.</td>
</tr>
<tr>
<td>Contexts indicators</td>
<td>Measurements of specific changes in the context; including situation analysis, policy developments, national plans and priorities, changes of speakers, etc.</td>
<td>Youth unemployment rate;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>% of education expenditure in government expenditure;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New legislative, policy and regulatory framework;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nominations in Ministry of Education.</td>
</tr>
<tr>
<td>Engagement indicators</td>
<td>Measurements of the quality of our engagement with others during the process of the implementation; including gender equality, inclusiveness, participatory in our relations and interactions, quality of approach, quality of relationship, etc.</td>
<td>Number and percentage of youth groups which have been meaningfully involved by Plan in project cycle management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of communities in which SRHR interventions are linked to and supported/resourced by village savings and loans programs (or equivalent*)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Degree to which Plan’s emergency response met the needs of adolescent girls / or safe space were considered appropriate</td>
</tr>
</tbody>
</table>

1 For more information on results, refer to guidelines on the Development of an Intervention Logic, and the Logical Framework Approach.
Beyond M&E indicators, projects will often have additional indicators to support project management and oversight, such as, performance indicators on financial expenditure, activities implementation, organisational health, accountability, risk etc.

**Note**
This technical manual will largely focus on the identification and definition of **results** indicators.

### 2.4 What are the different types of indicators?

All indicators, no matter the category, can be divided into **two basics types**:

<table>
<thead>
<tr>
<th>Type</th>
<th>Definition</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Quantitative</strong></td>
<td>Measure quantities or amounts; they are expressed as quantitative units such as numbers, proportions, rates, etc.</td>
<td><strong>Child mortality rate</strong>;</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>% of out of school children enrolled in alternative learning who complete a planned learning cycle</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Number of participants having completed a training</strong></td>
</tr>
<tr>
<td><strong>Qualitative</strong></td>
<td>Measure non-numerical factors, such as perceptions, judgements, experience, the characteristics of something; they are, in principle, expressed in words, photos, pictures and stories. Because it can be somewhat complicated to manage qualitative data for analysis, qualitative indicators are often quantified using scales and proportions.</td>
<td><strong>Degree to which parents are confident in their role as parents/primary caregiver</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>% of girls and boys who feel able to influence school decisions on issues that are important to them</strong></td>
</tr>
</tbody>
</table>

**Tip**
A robust M&E framework will be based on both quantitative and qualitative indicators as often, both types of information are necessary.

As well as either qualitative or quantitative, indicators can be described in other ways. Some **other types** of indicators to be aware of:

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Composite/ Compound</strong></td>
<td>Composite Indicators, or compound indicators, are formed with multiple individual indicators that are compiled into a single index on the basis of an underlying model of multi-dimensional concept that is being measured.</td>
<td><strong># &amp; quality of young peoples’ organizations’ own and joint collective actions for young people’s rights and gender equality</strong></td>
</tr>
<tr>
<td><strong>Indicators</strong></td>
<td></td>
<td><strong>This indicator is made up of:</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>A quantitative aspect:</strong> <strong>Number of organisations</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• <strong>A qualitative aspect:</strong> <strong>Description of changes</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>These two elements are brought together because we want enough information to conduct meaningful analysis. Looking at the two elements in isolation or one without the other would provide a partial view of changes in what young people’s organisations do.</td>
</tr>
</tbody>
</table>
### Mixed Indicator
- **Mixed Indicators** are an indicator that contains both quantitative and qualitative elements.
- **Number and description of changes in policies regarding child protection.**
- This indicator is made up of:
  - A quantitative aspect: **Number of changes**
  - A qualitative aspect: **Description of changes**
- These two elements are brought together because we want enough information to conduct meaningful analysis. Looking at the two elements in isolation or one without the other would provide a partial view of changes in policies, difficult to interpret.

### Coincident Indicators
- **Coincident Indicators** occur at approximately the same time as the conditions they signify.
- **Enrolment rate** (for an access to education outcome)
- **Average Yield** (for an increased productivity outcome)

### Pathway / Leading / Indicators / Steering Indicators
- **Pathway / Leading / Indicators / Steering Indicators** are often used for intermediate outcome measurement.
- They indicate: Are we on the right path?
- **Training participants per training session.**
- When there are 10 sessions:
  - Do they continue attending?
  - Does it seem like they find the training useful?
  - Do they seem to understand the concepts of the training?

### Proxy Indicators
- **Proxy Indicator** is used to measure something indirectly as this indicator itself is strongly correlated to that outcome.
- **Proportion of community that have replaced thatched roofs with corrugated iron roofs (for an economic status outcome)**
- The replacement of thatched roofs with corrugated iron roofs, while not directly evidence the economic status of a household, may indicate improved economic situation.

### 3. THE PROCESS: WHEN ARE INDICATORS IDENTIFIED AND WHO SHOULD BE INVOLVED?

#### 3.1 Design the Project
The first time we start to think about indicators is when we are starting to design our project, program or strategy – this is often at the same time a project proposal is being developed (PIOP Procedures, Project Strategy Cycle 1.3 (g)). At this stage, the problem is understood, solutions identified, and an intervention logic (often documented in the form of a Logical Framework) formulated. It is at this point that the intended results (output, outcome and impact) are developed, and we need to start thinking through how we will track, measure and monitor progress against these planned results. This requires identifying our initial results indicators.

#### 3.1.1 Who should be involved?
When identifying our indicators, we need to ensure we involve the right people to ensure there is a common understanding about the results the project plans to achieve, what success would look like, and therefore how the project will measure and track progress and achievements. As this early stage of indicator identification is often done at the same time as the design of the project and the formulation of the results statements, it is logical that these same stakeholders are involved in both processes. This will often include:
• if already identified and available, the project manager/project staff who will deliver the project;
• staff responsible for business development, including those who are in charge of developing project proposals and who are informed of donor’s requirements;
• M&E staff who can provide technical support in indicator identification, definition and who also understand the implications of different indicators to the overall project; as well as
• relevant technical staff who understand the project subject and content.

For Plan International where we work on projects, programmes and strategies together, this means working with staff across all of our offices including NOs, COs, RHs and GH.

Tip
The indicators chosen in the design will form the basis of the initial M&E Framework, namely the Indicator Matrix and Data Flow so it is important that they are well thought through as they will have significant resource implications.

3.2 Project Start-Up
The second time we think about indicators is when the project, programme or strategy is set to begin – or when the project proposal has been accepted (OOP Procedures, Project Strategy Cycle 2.3.1).

At this phase we should go back and review what we had initially planned, in discussion with donors where necessary, to make sure the indicators we chose are still appropriate for the results and still realistic considering the time and budget available.

It is critical that indicators are reviewed and refined to make sure that they are still clear and practical for those that need to use them. At this stage the results framework and corresponding indicators should be modified if necessary, and further defined and clarified to enable to the finalisation of the M&E Framework, namely the Indicator Matrix and Data Flow.

3.2.1 Who should be involved?
At this phase it is critical to involve internal stakeholders – the individuals that will actually use the indicators to collect information, as well as those who intend to use the results. For Plan International this would include:
• project manager/project staff who will deliver the project;
• M&E staff who support the operationalisation of the M&E Framework;
• relevant technical staff who are involved in the project; as well as
• any implementing partners who are actually involved in the project delivery.

At this stage it is also important to involve external stakeholders – the individuals who will be involved in the project, or intend to use the results and findings of the project M&E. This could include:
• national or local authorities;
• local NGOs, groups or networks; as well as
• beneficiaries and any target groups who will participate in or be affected by the project itself. 

While these stakeholders may not be “experts on indicators”, they are nevertheless key to ensuring that contextual realities are taken into account in the intervention logic and M&E Framework. Furthermore, involving all relevant stakeholders provides the opportunity to foster ownership of the project and its M&E.

If budget and time allow, it is good practice to bring together all relevant internal and external stakeholders in a workshop to collectively review and refine the intervention logic and M&E Framework to ensure a comprehensive and common understanding about what the project plans to achieve, how it will do so, what success looks like and how it will measure progress and results. If this isn’t possible, then internal stakeholders should at least come together at some point in the review and finalisation of the project, and then at least share and consult with external stakeholders.

Tip
At whatever phase indicators are being identified, it is critical that this process isn’t done in isolation. Group discussions, detailed conversations and critical thinking involving different types of people with different points of view all help in ensuring that the indicators chosen are appropriate, realistic and understood.
4. THE PROCESS: HOW TO IDENTIFY RESULTS INDICATORS

When identifying results indicators, you should look to follow the following steps:
Step 1: Examine and reflect on the intervention logic and results statement
Step 2: Select indicators from the Plan International indicator architecture
Step 3: Develop indicators
Step 4: Look across and consider the different types of indicators
Step 5: Verify the quality of indicators
Step 6: Verify the quantity of indicators

4.1 Step 1: Examining and reflecting on intervention logic and results statements

Before identifying indicators, it is absolutely critical to examine and reflect on each of the results statements of your intervention logic. This may also mean taking a step backwards and understanding how those results were identified in the first place, and how the intervention logic was conceptualised to ensure the results statements themselves are appropriate and responding to the identified needs. Once you are confident in your intervention logic and understand the planned results, it is critical to review and where required refine the results statements themselves to identify appropriate indicators.

Why is it important? There must be a very clear link between results indicators and planned results. Often, indicators will be selected at the same time as the intervention logic and results statement are being developed, however it is still important to ensure there is a clear understanding of the planned results as you identify indicators to ensure the indicators identified will provide the information needed.

When examining and reflecting on intervention logic and results statement, you should:
1. Check whether your results statements are SMART.
   - Identifying indicators requires that results statements are clear and as SMART as possible. Vague and/or non-SMART result statements will make it impossible to determine appropriate indicators. The clearer and SMARTer the results statements – the easier it is to develop indicators.
   - It is not uncommon that through the process of developing indicators we realize that the results statements themselves need to be clarified, reformulated or revised.

No matter the level of your result (output, outcome and impact), your result statement needs to be SMART:

| Specific | Results statements needs to be very specific so that it is clear exactly what results you are trying to achieve. It should be clear ‘who’ the results are for and exactly ‘what’ the results will be. Remember the greater the specificity, the greater the measurability. |
| Measurable | Results should be measurable as it is impossible to determine whether something has been achieved unless it can actually be measured. When developing your result statement, think about the indicators you will use to measure progress against this result and ask yourself whether you are able to actually collect the information you need. |
| Achievable | Results should be attainable within the given time frame of the project period and the resources available. While results are meant to inspire motivation, if results are too ambitious, you are risking your project being considered a failure because it will never be able to achieve the planned results. |
| Relevant | Results should be relevant and responsive to the ambitions of your project. They should make sense within the broader goals of Plan International and be responsive to the problem identified. |
| Time-Bound | Results should provide a time frame indicating when the result will be achieved. Including a time frame in the results helps in limiting the ambitions of the results to the scope of the project. |

2 For more information on results statements, including how to develop them in the design and documentation of a project, refer to guidelines on the Development of an Intervention Logic and the Logical Framework Approach.
Identify the critical components of your results statement

Once the results statements are clear to everyone that will use them, it is also useful to reflect on the content of the results statements and distinguish the critical components — what components of the statement are critical and need to be reflected on in the identification of the indicators?

Why is this important? By distinguishing the critical component of the result statement, we allow for a more focused process of identifying indicators and we ensure no critical components will be missed. Without having a good understanding of the critical components of the result statement, we risk not getting the information we need.

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### Example: Is your Result Statement SMART?

*School teachers are able to provide an inclusive learning environment*

| Specific?       | • Which school teachers are we referring to here?  
|                | • What do we mean by “able”? Does it mean there is a conducive environment in the school to provide inclusive learning environment? Or that teachers have the capacity to provide inclusive learning environment? |
| Measurable?    | • Are we able to determine from the current formulation of the result statement whether this has been achieved?  
|                | • Does the statement provide us with enough information to measure progress? |
| Achievable?    | Do we have enough information to know whether this result is achievable in the time period and budget parameters we have? |
| Relevant?      | For the purposes of this example, let us assume that the indicator is relevant for the intervention logic. |
| Time-Bound?    | There is no time frame identified therefore how do we know what period this result will be achieved in? |

A SMARTer result statement could be:

100 teachers in 10 schools in XX region have increased their skills in providing gender-responsive and inclusive learning through participation in basic and advanced capacity building workshops by the end of the intervention period.

Tip

When developing results statements, it is easier to make results clear andsmart if they are phrased as an active statement that clearly identifies the stakeholder responsible for the change. A formula you could try and apply is:

**Actor/Stakeholder > intended change > purpose of the change**

For example:

*Parents provide responsive care to their children to support their development*

**NOT**

*Children receive responsive care*

---
When identifying project’s results indicators we rarely start from nothing. In fact, we should be drawing from the Plan International indicator architecture, as well as getting inspiration from previous project’s results and M&E frameworks, as well as from our own experience.

When selecting project indicators (impact and outcome), we should:

1. Look at the critical components of your results statements and think through the indicators you will need (Step 1).
2. Draw from the outcome and impact indicators identified as a part of the Country Strategy M&E Framework to ensure alignment between country projects and the Country Strategy.
3. Where the project sits under a broader programme, indicators should be drawn from the Programme M&E Framework to ensure alignment between the project and the programme.
4. As much as possible, projects should draw from the results and indicators in the AOGD M&E Frameworks. This includes the situational analysis, impact, and outcome indicators dependant on the focus of your project.
5. Often donors will have their own Donor M&E Frameworks that need to be integrated.

At the end of the selection process, we should have a set of impact and outcomes indicators that respond to the information needs of the critical components of the result statement and are aligned with the Plan International indicator architecture.

Why should we select indicators from the Plan International Indicator Architecture?

- To avoid going through the process of developing, testing and refining indicators every single time
- They are already tried and tested
- They already have existing corresponding tested tools
- They facilitate the identification of relevant impact and outcome indicators that are usually more complex to identify
- They support global reporting
- They allow and facilitate consistent M&E analysis across projects, programmes, countries and at global level.

At this stage it is important to take a step back and examine the indicators selected together with the critical components of results statements and asking – *Is the set of indicators responding to the project’s information needs?* If the answer is “no” we should:
o re-examine the AOGD M&E Frameworks proposed list of optional indicators and try and fill gaps;
o consider selecting from other indicator frameworks, for example from sector specific frameworks.

Depending on the nature of the project and the context in which it will be implemented, there may still be critical gaps where we need additional indicators to meet the information needs of the project. At this point we should develop additional outcome or impact indicators.

4.2.1 Considerations for selecting impact indicators
Impact is defined as the long-term and sustainable change your project is contributing to. Impact level indicators measure at the level of your overall theory of change and will often combine results across different activities with different stakeholders. This means that at the project level, there will most probably be only one or two indicators at this level.

In line with the AOGDs to which the project should contribute, a situation analysis should have been carried out at the country or programme or even project level, which should have included the situational analysis indicators (context indicators) in each of the AOGD M&E Frameworks. The AOGD M&E Frameworks also include a small number of impact level indicators. In principle, the situational and impact indicators included in the AOGD M&E Frameworks should be comprehensive enough and we should not need to develop additional impact indicators.

4.2.2 Considerations for selecting outcome indicators
Outcomes are specific changes among target groups, stakeholders and institutions. Outcome indicators are critical in project M&E and must be chosen carefully to ensure we collect meaningful information on the effects of the project.

When selecting outcome indicators from the AOGD M&E Frameworks, we should select:
1. the foundational and complementary outcome indicator(s) for the AOGD depending on the scope of the project;
2. where necessary, the AOGD Frameworks also provide a suite of additional indicators that can act as a source for quality indicators.

4.2.3 Considerations for donor requirements
Donors also often have their own results frameworks and indicators in order to ensure it is possible to demonstrate progress across all projects they finance. As a result, some donors require that specific indicators are integrated in projects’ results frameworks. These mandatory results and indicators should be considered from the beginning of the design process to ensure the project is responding to what the donor is interested in funding.

Where this hasn’t been done as the project is designed before identifying a donor for example, there is a risk that these required indicators do not clearly link to the project’s planned results. When it is the case, it is recommended that all relevant offices involved in managing the donor relationship – this can include either/both COs and NOs – to reflect together to understand why the donor indicators aren’t aligned to the project result framework. There might be an issue with the project’s goal and/or design that is important to clarify. Or there might be an issue with how these indicators are defined, and whether their definition may be adapted to the project’s realities and/or information needs. This is an opportunity to try and negotiate alignment between the Plan International indicators and the donor indicator frameworks.

4.3 Step 3: Develop indicators
When developing your output indicators, and when you aren’t able to select outcome indicators from the Plan International indicator architecture (Step 2) to meet all of the information needs of the results statements, you will need to develop indicators from scratch.

When developing indicators, we should:
1. Look at the critical components of your results statements and think through what you want to measure (Step 1). Ask yourself:
o What are we looking to actually measure?
1. What can indicate progress against the planned result?
   - What are the possible units of measurement?

2. Once you have an idea of the types of measurements you will need to respond to the critical components of the results statement, consider **how you would obtain the information necessary to inform such a measurement**:
   - Do we need to ask people, and if so, who?
   - Do we need to observe something, and if so what?
   - Do we need to collect information from somewhere else, and if so, where?

3. Once you have an idea of what information you need to inform your measurement, **consider if such a measurement is actually possible**:
   - Can we get the information we need to inform this measurement?
   - Do we have authority/permission to access this information?
   - Do we need consider a proxy or another way of informing this measurement?

4. You should also consider whether this measurement is ethical to obtain:
   - Especially when dealing with children, and other vulnerable people, is it ethical to obtain this information?
   - Will you put anyone at risk by obtaining this information?
   - And if there are ethics concerns, is there another way to get this information or do you need to reconsider the measurement all together?
   - For more information on ethics in MERL initiatives, refer to the **Framework for Ethical MERL**.

5. Finally, you will need to write your indicators.

### 4.3.1 How to write indicators?

When writing an indicator, the ideal indicator should contain 5 key elements:

<table>
<thead>
<tr>
<th>Element</th>
<th>Definition</th>
<th>Key Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit of Measure</td>
<td>Unit of measure requires (i.e. number, percent, proportion, mean etc.)</td>
<td>To what extent shall the change occur?</td>
</tr>
<tr>
<td>Unit of Analysis</td>
<td>Who or what is being observed (i.e. individuals, institutions, social group)</td>
<td>Who should change something?</td>
</tr>
<tr>
<td>Context</td>
<td>Circumstances indicating the particular aspect of the performance for which the indicator is intended</td>
<td>What exactly should change?</td>
</tr>
<tr>
<td>Timing</td>
<td>Time dimension for this indicator</td>
<td>(Until) when should the change occur? In which time period is the change measured?</td>
</tr>
<tr>
<td>Disaggregation</td>
<td>disaggregation of data for this indicator (i.e. sex, ethnicity, age range, disability etc.)</td>
<td>Which sub-groups are of interest to us?</td>
</tr>
</tbody>
</table>

**Example: Identify the 5 elements of an indicator**

Percentage of victims (sex/age) of the armed conflict accessing services in the past six months who are satisfied with the collective and individual reparation and protection services provided by the Unit for Victims

<table>
<thead>
<tr>
<th>Element</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit of Measure</td>
<td>Percentage</td>
</tr>
<tr>
<td>Unit of Analysis</td>
<td>Victims of armed conflict accessing services</td>
</tr>
<tr>
<td>Context</td>
<td>who are satisfied with the collective and individual reparation and protection services provided by the Unit for Victims</td>
</tr>
<tr>
<td>Timing</td>
<td>in the past six months</td>
</tr>
<tr>
<td>Disaggregation</td>
<td>(sex/age)</td>
</tr>
</tbody>
</table>

**4.4 Step 4: Look across and consider the different types of indicators**

Once you have gone through and reflected on your intervention logic and results statements (**Step 1**), selected indicators from the Plan International indicator architecture (**Step 2**), and developed indicators (**Step 3**) from scratch to fill any gaps, you should now have a comprehensive list of potential results indicators. Now you need to **look across** the indicators you have identified and consider how they will work together to show progress against planned results, the achievement of objectives, and the quality of approaches and relationships.
A good practice to ensure a well-designed M&E Framework is to have sets of results indicators that include both quantitative and qualitative indicators. When developing indicators, we tend to come up with indicators that are usually quantitative. This is not surprising as quantities or amounts are an easy way to show progress. However, quantitative indicators do not provide information such as the perceptions of beneficiaries regarding the relevance, appropriateness or quality of the results achieved. This information is obtained with qualitative indicators - however, many qualitative indicators can be quantified to facilitate analysis.

As you look across the indicators you have identified and consider how they will work together, for each result statement, we should:

1. Check the critical components identified in your results statement, try and identify where qualitative information, in particular, is required.
2. Review the indicators you have identified for that result statement and ensure there are the necessary indicators included to provide qualitative information, where required.
3. Look at the different indicators you have identified for that result statement and ask yourself:
   - Will the information in these indicators complement each other?
   - How will they work together to provide an indication of progress, achievement and quality?
   - Is anything missing?
4. Where gaps are identified, consider reviewing Plan International’s indicator architecture (Step 2) and seeing if you can select any additional indicators, or where necessary, developing indicators (Step 3) from scratch to address these gaps.

### Examples: Looking Across Indicators

Here is an example of sets of qualitative and quantitative indicators that complement each other and work together to respond to the information needs of the result statement.

<table>
<thead>
<tr>
<th>Result</th>
<th>Qualitative</th>
<th>Quantitative</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Output:</strong> Girls and boys understand and are able to articulate their legal rights as children.</td>
<td>Perceptions of girls and boys on the relevance of training topics on child rights; Proportion of girls and boys that express self-confidence in discussing child rights with their peers at the end of the training</td>
<td>Number of participants who have completed the training on child rights; % of participants that demonstrate adequate knowledge of child rights at the end of the training.</td>
</tr>
<tr>
<td><strong>Outcome:</strong> Girls and boys know where, how and when to report a protection violation</td>
<td>% of children who are confident to report a protection violation to a reporting structure</td>
<td>Number of reports of protection violation to a reporting structure.</td>
</tr>
</tbody>
</table>

### 4.5 Step 5: Verifying the quality of indicators

Once you have gone through and reflected on your intervention logic and results statements (Step 1), selected indicators from the Plan International indicator architecture (Step 2), developed indicators (Step 3) from scratch to fill any gaps, and looked across and considered how they will work together (Step 4), you now need to verify the quality of individual indicators.

While identified indicators may all be relevant to the result statement, as an indicator, they might not possess all characteristics of a quality indicator. For each indicator you should go through them and assess whether they meet the following characteristics:

- CREAM (clear, relevant, economic, adequate, monitorable/measurable)
- Other Characteristics (neutral language, sensitive, ethical)
- 5 elements of an indicator (unit of measure, unit of analysis, context, timing, disaggregation) (Step 3)
A useful framework for assessing the quality of indicators is CREAM.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
</tr>
</thead>
</table>
| CLEAR          | • each indicator can be defined **precisely and unambiguously**;  
                 • if two people use the same indicator independently from each other they will understand it in the same way and seek to obtain the same data. |
| RELEVANT       | • each indicator responds to at least one of the critical components of at least one result statement;  
                 • there is a plausible and valid link between the indicator(s) and the planned result. |
| ECONOMIC       | • given the project resources, the individual indicator can be obtained at a reasonable cost taking into consideration:  
                 o tool development  
                 o data collection  
                 o sample strategy – include size, strategy and disaggregation  
                 o analysis  
                 o validation and data quality assurance |
| ADEQUATE       | • the individual indicator or complimenting other indicator(s), provides sufficient information for analysis. |
| MONITORABLE/MEASURABLE | • the individual indicator can be easily monitored, and amenable to independent validation;  
                              • data required to inform this indicator can be collected reliably and in a timely manner. |
**Example: Working through CREAM**

<table>
<thead>
<tr>
<th>Result Statement</th>
<th>Adolescent and youth involved in the project are aware of the SRH services available to them</th>
</tr>
</thead>
<tbody>
<tr>
<td>Result Indicator</td>
<td>Men’s condom use</td>
</tr>
</tbody>
</table>

Does this indicator meet the CREAM characteristics?

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
<th>Meet the criteria?</th>
<th>Possible Solution</th>
</tr>
</thead>
</table>
| **CLEAR**        | • each indicator can be defined precisely and unambiguously;                                    | No - the indicator as it is currently worded is unclear and ambiguous. For example:  
|                  |                                                                                                  | • Which men?       | • Condom use when and in what context?                                             |% of men involved in the project that have used condoms in their last sexual encounter. |
| **RELEVANT**     | • there is a plausible and valid link between the indicator(s) and the planned result.          | No – considering the output statement is seeking to monitor awareness of SRH services not use. Also, the target group is specifically adolescent and youth. |% of adolescent and youth (disaggregated by sex) involved in the project that are aware of SRH services available to them. |
| **ECONOMIC**     | • given the project resources, the individual indicator can be obtained at a reasonable cost    | Not enough information - it depends on the parameters of the project budget, and the sample strategy. | Would you ask every man in the community? Or just those involved in the project? |
| **ADEQUATE**     | • the individual indicator or complimenting other indicator(s), provides sufficient information for analysis. | No – asking about men’s condom use is not enough to tell you whether adolescents and youth are aware of SRH services. It may be linked but on its own it won’t give you this information. | Other indicators would need to be considered to compliment this i.e. % men accessing SRH services, Number of men to attend SRH services awareness sessions. |
| **MONITORABLE/MEASURABLE** | • the individual indicator can be easily monitored, and amenable to independent validation;  
|                  | • data required to inform this indicator can be collected reliably and in a timely manner.       | Not enough information – in some contexts talking about sex is very difficult. Therefore, getting reliable information from men themselves may be difficult. | Consider different sources of information i.e. number of condoms taken from SRH services. |
Other characteristics of a good indicator includes:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
</tr>
</thead>
</table>
| Neutral Language | • A good indicator is expressed in neutral language  
                   • Words indicating the direction of the change such as “increased” or “improved” should not be used.  
                   • Direction of change should be described in the indicator target, part of your indicator tracker.  
                   **Example:**  
                   • Non-neutral indicator: *Increased % of vulnerable population demonstrating knowledge in resilient practices*  
                   • Neutral indicator: *% of vulnerable population demonstrating knowledge in resilient practices* |
| Sensitive | • Is the indicator sensitive to gender, inclusion and age groups?  
            • Consider the different ways different people might experience the situation, the activities and changes that are happening. Will the indicator be able to tell us about their different experiences? |
| Ethical | • Is the indicator ethical to obtain, and does it expose any respondents to any risks?  
         • And if there are ethics concerns, is there another way to get this information or do you need to reconsider the measurement all together?  
         • For more information on ethics in MERL initiatives, refer to the Framework for Ethical MERL. |

For Plan International, **all of these criteria are equally important and should be thought through and considered.** If the CREAM characteristics or the other characteristics of a good indicator, are not met, or the 5 elements of an indicator are not present then ask:

- Is it the right indicator or do we need to identify another that is more appropriate?
- Does the indicator need to be clarified to make it clearer, in neutral language, more sensitive, or to add in any of the missing elements?
- Does the indicator need to be revised or refined so that it is more specific and relevant to the result statement?
- Does the indicator need to be reconsidered or eliminated from the list if its not adequate, economic or ethical?
- Does the indicator need to be linked to another to address some of the gaps?

At the end of this process, you should have a comprehensive and complete list of quality indicators.

**4.6 Step 6: Verifying the quantity of indicators**

Once you have gone through and reflected on your intervention logic and results statements (Step 1), selected indicators from the Plan International indicator architecture (Step 2), developed indicators (Step 3) from scratch to fill any gaps, and looked across and considered how they will work together (Step 4), and you have gone through and verified the quality of the indicators (Step 5) it is now time to look across the indicators as verify the quantity of indicators.

*It is often not feasible, manageable or logical to operationalise your entire list of indicators.* When developing indicators, the process requires us to consider all the information we would want to know, often this means our list includes indicators that would be interesting to analyse concerning the result, the quality of the results, the perceptions of beneficiaries and stakeholders, etc. The amount of interesting information may be infinite, however, not all of it is absolutely necessary.

Every indicator you select requires additional resources and planning for data collection and analysis. To keep you M&E Framework management, the key is to only select the most important and relevant indicators that capture the most useful information. The more indicators, the more risk to the manageability and feasibility of data collection, calculation and analysis. The risk is wasted efforts collecting, cleaning and managing all this data that sits unused in a database.

The difficulty is that it is not possible to identify a recommended number of indicators for each planned result. While one indicator may be enough to show progress for one result, another result may require 3 - 4 indicators or more to accurately demonstrate progress.

When figuring out the right number of indicators, we need to follow the rule of the thumb: **As few as possible and as many as necessary.**
In order to refine the total number of indicators:

1. Review the comprehensive list of indicators against each result and ask yourself, **what is necessary?** To help identifying the “necessary”, think through:
   - What indicators are **“must have”**? This is a key indication of progress for our project and we won’t be able to tell whether we have progressed towards or achieved our planned results without this information.
   - What indicators are **“nice to have”**? This would give us interesting information and help us understand a particular issue better, but it is not critical for measuring progress against intended results, or maybe we are able to get this information from another indicator?

2. Consider the list of indicators in relation to:
   - the critical components of your result statement,
   - the project’s goal,
   - methodology,
   - project context and available resources.

3. Try and decide which indicators are **“must have”** and which are **“nice to have”**.
   - As the “must havess” are absolutely necessary, they remain a part of the final **M&E Framework**.
   - Try and prioritise the “nice to havess” based on the priorities of your project from least to most important.
   - Think through the implications of keeping these indicators in the final list including resources required for data collection, management and analysis.
   - Dependant on the resources available, you may need to eliminate some or even all indicators in the “nice to have” category. **Plan International commits to doing quality M&E – it is better to do less and do it well, than to take on too many indicators and not collect, analyse or use them properly.**

4. Finally, we should verify the quality of the final list of indicators now that we have eliminated some from the list:
   - Does the list of indicators adequately respond to the project’s information needs on progress against intended results at all levels (output, outcome and impact)?
   - Does the final list of indicators cover all the critical components of the results statements and provide sufficient information for analysis?
   - Considering the available resources (human and financial) for the project’s M&E activities, is there enough to operationalise the **M&E Framework** with the final list of indicators to a high quality?
   - Do you need to make any further amendments to the indicators?

At the end of this process, you should now have a final list of necessary, quality indicators that respond to the results identified in your intervention logic.

---

**5. THE PROCESS: HOW TO DEFINE RESULTS INDICATORS**

Now the process requires you to define and detail all specifications of each indicator including how it is to be disaggregated, calculated and how it should be analysed.

**Why is it important?** To ensure consistent aggregation and comparison of data overtime. Before detailing how to calculate and analyse an indicator, it is essential to have a very clear definition of the indicator including definitions for disaggregation, calculation and analysis. Without this detail, the indicator risks being unclear again subject to interpretation.

When defining results indicators, you should look to follow the following steps:

- **Step 7: Define the data disaggregation**
- **Step 8: Define the detailed specifications**
- **Step 9: Define the method of calculation**
- **Step 10: Define the method of analysis**

**5.1 Step 7: Define the data disaggregation**

Another aspect to clarify is how data will be disaggregated. At Plan International, the **Minimum Beneficiary Disaggregation** is:

- Sex (M, F)
- Age (<18, >18)

These disaggregation’s are the minimum requirement for Plan International. In addition, we should decide whether any more disaggregation is needed for each individual indicator dependant on the information needs of your project.
However keep in mind that disaggregation of your beneficiaries has implications for:

- Designing your data collection tools and approaches to ensure you capture the required disaggregated categories as you collect data;
- Designing your sampling strategy and sample size to ensure you prepare to collect information from all groups as required by the minimum disaggregation requirements;
- Analysing the data to ensure you compare and analyse the different responses/experiences from all groups.

**Note:** All mandatory and optional AOGD impact and outcomes indicators are defined (including required data disaggregation) in their respective indicator matrix, found [here](#).

Instructions for the disaggregation of your indicator, both for data collection and for analysis, should be included as part of your disaggregation requirements in your Indicator Matrix, [here](#).

### 5.2 Step 8: Define the detailed specifications

The specification describes exactly what the indicator means so that there is no room for ambiguity of misinterpretation. The purpose of the indicator specification and definition is to ensure a consistent understanding of the indicator so that data is collected and analysed consistently. If you don’t have well documented definitions there is a serious risk that indicators might be calculated differently and at different times, which means the findings can’t be accurately aggregated or compared.

When defining the detailed specification, think through:

1. What are the critical components of the result statement, and how is this indicator responding to these critical components?
2. What terms/words/phrases/acronyms in the indicator need to be explained/specified to ensure a consistent understanding?
Example 1: Thinking through Specifications

Total number of teachers having completed the training on gender-responsive and inclusive learning and disaggregated by school

Some key questions to answer when thinking through the specification of this indicator:
- What does “completed the training” mean?
  - If the training runs for 5 sessions, do they have to have attended all sessions to qualify for completion?
  - Or do they have to pass a test to qualify for completion?
  - Or at least 1 training session has been attended?
  - Or at least 75% of classes to be considered completed?
- What does gender-responsive and inclusive learning mean?
  - What does the training content include to make it about gender-responsive and inclusive learning?
  - Does it need to be the same in every school or can it be contextualised?

Example 2: Thinking through Specifications

% of parents/primary caregivers with adequate nurturing care practices

Some key questions to answer when thinking through the specification of this indicator:
- What are “nurturing care practices”?
  - Can include:
    - Health (knows danger signs of illness in young children, washes hands on at least three critical occasions, provides adequate household management of sick children)
    - Good Nutrition (minimum meal frequency, minimum dietary diversity and exclusive breastfeeding if have child under 6 months)
    - Early Learning and Play (engaged in play activities with child in last 3 days, provides opportunities for free play, regularly talks and has conversations with child)
    - Responsive Caregiving (agreement with parenting behaviours that indicate responsiveness, reports using responsive feeding practices)
    - Safety/security and protection (leaves the child alone (or in care of older child) for more than an hour in typical week; uses violent discipline when child misbehaves)
- What is “adequate”?
  - Is it all these elements? Or is it some? And if it is some which some?
  - Is it all component within each element or only some? And if it is some, how many?

Instructions as to the detailed specifications should be included as part of your definition and specifications in your Indicator Matrix, here.

5.3 Step 9: Define the method of calculation

Defining the method of calculation requires you to define the specific steps required to determine the indicator value, and how you are going to calculate that. This process may highlight that you need multiple pieces of information from different sources in order to calculate your indicator. If complete, the indicator should identify the unit of measurement, which will indicate the type of calculation. Here is a list of basic calculations and how you would apply them to indicators:

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Description</th>
<th>Example: Indicator</th>
<th>Example: How has the indicator been calculated?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number (#)</td>
<td>A straight count</td>
<td>Number of teachers having completed the training</td>
<td>Total number of teachers having completed the training in XX in school Y + total number of teachers having completed the training in XX in school Z = Total number of teachers having completed the training in XX</td>
</tr>
</tbody>
</table>
### Percentage (%)

A fraction that provides a proportion multiplied by 100; it measures a number (numerator) in relation to the whole (denominator).

\[
\text{% of teachers trained} = \frac{\text{(Numerator)}}{\text{(Denominator)}} \times 100
\]

<table>
<thead>
<tr>
<th>Percentage (%)</th>
<th>A fraction that provides a proportion multiplied by 100; it measures a number (numerator) in relation to the whole (denominator)</th>
<th>% of teachers trained</th>
<th>(Numerator) Total number of teachers trained</th>
<th>(Denominator) Total number of teachers</th>
</tr>
</thead>
</table>

### Rate

A fraction that compares measurements that have different units; it usually involves three pieces of data.

\[
\text{Continuous training rate of teachers in country XX per 1'000} = \frac{\text{Total number of teachers who completed continuous training}}{\text{Total number of teachers in country XX}} \times 1'000
\]

### Average

A number that represents the typical or central value in a data set.

\[
\text{Average teachers training test scores} = \frac{\text{Test score teacher Y} + \text{Test score teacher Z}}{\text{(Number of test scores)} 2} = \text{Average score}
\]

**Note:** Instructions on how to calculate mandatory and optional AOGD impact and outcomes indicators are specified in their respective indicator matrix [here](#).

Instructions for the calculation should be included as part of your definition and specifications in your Indicator Matrix, [here](#).

#### 5.3.1 Calculating Composite Indicators

Some indicators require more complex calculations, particularly when using composite indicators. **Remember** - composite indicators, or compound indicators are a type of indicator formed with multiple individual indicators that are compiled into a single index. For these composite indicators we need to:

1. Single out each of the individual indicator components – the different elements within the indicator that need to be calculated.
2. Decide how each of the individual indicator components is to be calculated;
3. Decide whether all individual indicator components have the same weight or, if one or some of them, have more (or less) weight;
4. Scale their respective weight to define how the composite indicator will be totalled/aggregated.

The more complex the composite indicator, the more critical the detailed specifications for a consistent calculation. It is necessary (no matter how tedious it can be, depending on the nature of the composite indicator) to spell out the multiple steps to come up with a precise definition of the indicator.
Example: Calculating a Composite Indicators:

**Outcome Indicator:** \% of parents/primary caregivers with adequate nurturing care practices

**Specification:**
- Overall percentage and percentage by nurturing care component
- The caregiver self-reports key knowledge/practices/behaviours in at least three of the five dimensions of nurturing care

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Key Practices</th>
<th>Criteria to satisfy dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>• knows danger signs of illness in young children,</td>
<td>YES to at least TWO practices</td>
</tr>
<tr>
<td></td>
<td>• washes hands on at least three critical occasions,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• provides adequate household management of sick children</td>
<td></td>
</tr>
<tr>
<td>Good Nutrition</td>
<td>• minimum meal frequency,</td>
<td>YES to all practices</td>
</tr>
<tr>
<td></td>
<td>• minimum dietary diversity and exclusive breastfeeding if have child under 6 months</td>
<td></td>
</tr>
<tr>
<td>Early Learning and Play</td>
<td>• engaged in play activities with child in last 3 days,</td>
<td>YES to at least TWO practices</td>
</tr>
<tr>
<td></td>
<td>• provides opportunities for free play,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• regularly talks and has conversations with child</td>
<td></td>
</tr>
<tr>
<td>Responsive Caregiving</td>
<td>• agreement with parenting behaviours that indicate responsiveness,</td>
<td>YES to at least ONE practice</td>
</tr>
<tr>
<td></td>
<td>• reports using responsive feeding practices</td>
<td></td>
</tr>
<tr>
<td>Safety/Security and Protection</td>
<td>• leaves the child alone (or in care of older child) for more than an hour in typical week;</td>
<td>NO to TWO practices</td>
</tr>
<tr>
<td></td>
<td>• uses violent discipline when child misbehaves</td>
<td></td>
</tr>
</tbody>
</table>

1. **Single out each of the individual indicator components – the different elements within the indicator that need to be calculated.**
   Health, Good Nutrition, Early Learning and Play, Responsive Caregiving, Safety/Security and Protection

2. **Decide how each of the individual indicator components is to be calculated:**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Key Practices</th>
<th>Criteria to satisfy dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>• knows danger signs of illness in young children,</td>
<td>YES to at least TWO practices</td>
</tr>
<tr>
<td></td>
<td>• washes hands on at least three critical occasions,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• provides adequate household management of sick children</td>
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<tr>
<td></td>
<td>• provides opportunities for free play,</td>
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<td></td>
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<td>• agreement with parenting behaviours that indicate responsiveness,</td>
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<td>Safety/Security and Protection</td>
<td>• leaves the child alone (or in care of older child) for more than an hour in typical week;</td>
<td>NO to TWO practices</td>
</tr>
<tr>
<td></td>
<td>• uses violent discipline when child misbehaves</td>
<td></td>
</tr>
</tbody>
</table>

3. **Decide whether all individual indicator components have the same weight or, if one or some of them, have more (or less) weight:**

<table>
<thead>
<tr>
<th>Dimension of nurturing care</th>
<th>Weighting by dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>YES to min. 2 practices = 1 point</td>
</tr>
<tr>
<td>Good nutrition</td>
<td>YES to all practices = 1 point</td>
</tr>
<tr>
<td>Early learning and play</td>
<td>YES to min. 2 practices = 1 point</td>
</tr>
<tr>
<td>Responsive care</td>
<td>YES to min. 1 practice = 1 point</td>
</tr>
<tr>
<td>Safety/security and protection</td>
<td>NO to both practices = 1 point</td>
</tr>
</tbody>
</table>
4. Scale their respective weight to define how the composite indicator will be totalled/aggregated.

<table>
<thead>
<tr>
<th>Dimension of nurturing care</th>
<th>Weighting by dimension</th>
<th>Weighting overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>YES to min. 2 practices = 1 point</td>
<td>Adequate nurturing care practices = minimum adequate nurturing care across at least 3 out of the 5 dimensions OR = at least 3 out of 5 points</td>
</tr>
<tr>
<td>Good nutrition</td>
<td>YES to all practices = 1 point</td>
<td></td>
</tr>
<tr>
<td>Early learning and play</td>
<td>YES to min. 2 practices = 1 point</td>
<td></td>
</tr>
<tr>
<td>Responsive care</td>
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<td></td>
</tr>
<tr>
<td>Safety/security and protection</td>
<td>NO to both practices = 1 point</td>
<td></td>
</tr>
</tbody>
</table>

Calculate each of the individual indicator components, weight and aggregate as planned.

First calculate by dimension

a) \[
\left\{ \frac{\text{Number of caregiver having responded YES to at least TWO of HEALTH practices}}{\text{Number of survey respondents}} \right\} \times 100
\]

b) \[
\left\{ \frac{\text{Number of caregiver having responded YES to ALL practices of NUTRITION practices}}{\text{Number of survey respondents}} \right\} \times 100
\]

c) \[
\left\{ \frac{\text{Number of caregiver having responded YES to at least TWO of LEARNING practices}}{\text{Number of survey respondents}} \right\} \times 100
\]

d) \[
\left\{ \frac{\text{Number of caregiver having responded YES to at least ONE of RESP. CARE practices}}{\text{Number of survey respondents}} \right\} \times 100
\]

e) \[
\left\{ \frac{\text{Number of caregiver having responded NO to BOTH of SAFETY practices}}{\text{Number of survey respondents}} \right\} \times 100
\]

Second weight and aggregate the total

\[
\left\{ \frac{\text{Number of care givers that report a minimum number of key practices across at least THREE dimensions of nurturing care}}{\text{Number of caregivers reached through the programme}} \right\} \times 100
\]

= % of parents/primary caregivers with adequate nurturing care practices

5.4 Step 10: Define the method of analysis

Data analysis is the process to transform raw, collected data into usable and useful information. The greatest amount and best quality data are meaningless if not analysed. Likewise, the greatest amount and best quality of analysis mean nothing if not used and not useful. That is why it is important to reflect on how to analyse your indicator from the beginning.

When figuring out your method for analysis, think through:

1. What specific information do decision makers need to make decisions?
2. What do broader stakeholders need to know from these indicators?
3. What do you need to be able to report to give these stakeholders what they need to know?
4. Therefore, what are the questions that the analysis of the indicators needs to answer to allow for reporting this information?
5. You should also ask yourself:
   - Is there anything in particular to consider when analysing these indicators?
     - For example, does an increase in prevalence rate of domestic violence mean that the prevalence is actually increasing, or just that the reporting mechanisms are functioning better, or that people are more comfortable to report?
   - Should this indicator be analysed together with another indicator in order to better understand the results?
This approach will enable you to frame the analysis, highlight any particular considerations, and ensuring consistent comparison of analysis over time and making sure that you have the information needed for reporting.

For more information on reporting and conducting a stakeholder analysis, refer [here](#).

Instructions for analysis should be detailed in your Data Flow, [here](#).

6. WHAT NEXT?
By following this process to identify and define indicators, you should have:
- reflected on your intervention logic and results statements ([Step 1](#)),
- selected indicators from the Plan International indicator architecture ([Step 2](#)),
- developed indicators ([Step 3](#)) from scratch to fill any gaps,
- looked across and considered how they will work together ([Step 4](#)),
- gone through and verified the quality of the indicators ([Step 5](#)),
- gone through the indicators and verify the quantity of indicators ([Step 6](#)),
- defined your indicators in terms of
  - disaggregation ([Step 7](#)),
  - specification ([Step 8](#)),
  - calculation ([Step 9](#)),
  - analysis ([Step 10](#)).

Now you should have all the information you need to think through and complete the M&E Framework (guidance and instructions can be found [here](#)), in particular your:
- the Indicators Matrix (guidance and instructions can be found [here](#)) and
- the Data Flow (guidance and instructions can be found [here](#)).

ANNEX 1: IDENTIFYING AND DEFINING INDICATORS - OVERVIEW

<table>
<thead>
<tr>
<th>Step</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDICATORS: THE FUNDAMENTALS</td>
<td></td>
</tr>
<tr>
<td>What are indicators?</td>
<td>Plan International defines indicators as specific measurements that will show progress against planned results, achievement of objectives, quality of approaches and relationships as well as progress in the use of allocated funds.</td>
</tr>
<tr>
<td>What are the different categories of indicators?</td>
<td></td>
</tr>
<tr>
<td>Category</td>
<td>Definition</td>
</tr>
<tr>
<td>Results Indicators</td>
<td>Outputs indicators</td>
</tr>
<tr>
<td></td>
<td>Outcomes indicators</td>
</tr>
<tr>
<td></td>
<td>Impact indicators</td>
</tr>
<tr>
<td>Contexts indicators</td>
<td>Measurements of specific changes in the context; including situation analysis, policy developments, national plans and priorities, changes of speakers, etc.</td>
</tr>
<tr>
<td>Engagement indicators</td>
<td>Measurements of the quality of our engagement with others during the process of the implementation; including gender equality, inclusiveness, participatory in our relations and interactions, quality of approach, quality of relationship, etc.</td>
</tr>
<tr>
<td>What are the different types of indicators?</td>
<td></td>
</tr>
<tr>
<td>Type</td>
<td>Definition</td>
</tr>
<tr>
<td>BASIC TYPES</td>
<td>Measure quantities or amounts; they are expressed as quantitative units such as numbers, proportions, rates, etc.</td>
</tr>
</tbody>
</table>
**Qualitative**

Measure non-numerical factors, such as perceptions, judgements, experience, the characteristics of something; they are, in principle, expressed in words, photos, pictures and stories. Because it can be somewhat complicated to manage qualitative data for analysis, qualitative indicators are often quantified using scales and proportions.

**OTHER TYPES**

<table>
<thead>
<tr>
<th>Composite/Compound Indicators</th>
<th>Composite Indicators, or compound indicators, are formed with multiple individual indicators that are compiled into a single index on the basis of an underlying model of multi-dimensional concept that is being measured.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixed Indicator</td>
<td>Mixed Indicators are an indicator that contains both quantitative and qualitative elements.</td>
</tr>
<tr>
<td>Coincident Indicators</td>
<td>Coincident Indicators occur at approximately the same time as the conditions they signify.</td>
</tr>
<tr>
<td>Pathway / Leading / Indicators/Steering Indicators</td>
<td>Pathway / Leading / Indicators/Steering Indicators are often used for intermediate outcome measurement. They indicate: Are we on the right path?</td>
</tr>
<tr>
<td>Proxy Indicators</td>
<td>Proxy Indicator is used to measure something indirectly as this indicator itself is strongly correlated to that outcome.</td>
</tr>
</tbody>
</table>

**THE PROCESS: HOW TO IDENTIFY RESULTS INDICATORS?**

**Step 1: Examine and reflect on the intervention logic and results statement**

1. Check whether your results statements are SMART (Specific, Measurable, Achievable, Relevant, Time-Bound).
2. Identify the critical components of your results statement

**Step 2: Select indicators from the Plan International indicator architecture**

1. Look at the critical components of your results statements and think through the indicators you will need (Step 1).
2. Draw from the outcome and impact indicators identified as a part of the Country Strategy M&E Framework to ensure alignment between country projects and the Country Strategy.
3. Where the project sits under a broader programme, indicators should be drawn from the Programme M&E Framework to ensure alignment between the project and the programme.
4. As much as possible, projects should draw from the results and indicators in the AOGD M&E Frameworks. This includes the situational analysis, impact, outcome indicators.
5. Often donors will have their own Donor M&E Frameworks that need to be integrated.

**Step 3: Develop indicators**

1. Look at the critical components of your results statements and think through the indicators you will need (Step 1).
2. Once you have an idea of the types of measurements you will need to respond to the critical components of the results statement, consider how you would obtain the information necessary to inform such a measurement.
3. Once you have an idea of what information you need to inform your measurement, consider if such a measurement is actually possible.
4. You should also consider whether this measurement is ethical to obtain.
5. Finally, you will need to write your indicators. When writing an indicator, the ideal indicator should contain 5 key elements:
   - Unit of Measure
   - Unit of Analysis
   - Context
   - Timing
   - Disaggregation

**Step 4: Look across and**

1. Check the critical components identified in your results statement, try and identify where qualitative information, in particular, is required.
consider the different types of indicators

2. Review the indicators you have identified for that result statement and ensure there are the necessary indicators included to provide qualitative information, where required.

3. Look at the different indicators you have identified for that result statement and ask yourself:
   - Will the information in these indicators complement each other?
   - How will they work together to provide an indication of progress, achievement and quality?
   - Is anything missing?

4. Where gaps are identified, consider reviewing Plan International’s indicator architecture (Step 2) and seeing if you can select any additional indicators, or where necessary, developing indicators (Step 3) from scratch to address these gaps.

Step 5: Verify the quality of indicators

While identified indicators may all be relevant to the result statement, as an indicator, they might not possess all characteristics of a quality indicator. For each indicator you should go through them and assess whether they meet the following characteristics:

- CREAM (clear, relevant, economic, adequate, monitorable/measurable)
- Other Characteristics (neutral language, gender sensitive, ethical)
- 5 elements of an indicator (unit of measure, unit of analysis, context, timing, disaggregation) (Step 3)

Step 6: Verify the quantity of indicators

1. Review the comprehensive list of indicators against each result and ask yourself, what is necessary? To help identifying the “necessary”, think through:
   - What indicators are “must have”?
   - What indicators are “nice to have”?

2. Try and decide which indicators are “must have” and which are “nice to have”. As the “must haves” are absolutely necessary, they remain a part of the final M&E Framework.

3. Try and prioritise the “nice to has” based on the priorities of your project from least to most interesting.

4. Think through the implications of keeping these indicators in the final list including resources required for data collection, management and analysis.

5. Dependant on the resources available, you may need to eliminate some or even all indicators in the “nice to have” category. Plan International commits to doing quality M&E – it is better to do less and do it well, than to take on too many indicators and not collect, analyse or use them properly.

6. Finally, we should verify the quality of the final list of indicators now that we have eliminated some from the list.

THE PROCESS: HOW TO DEFINE RESULTS INDICATORS?

Step 7: Define the data disaggregation

Another aspect to clarify is how data will be disaggregated. At Plan International, the Minimum Beneficiary Disaggregation is:

- Sex (M, F)
- Age (<18, >18)

These disaggregation’s are the minimum requirement for Plan International. In addition, we should decide whether additional disaggregation is needed for each individual indicator dependant on the information needs of your project.

Step 8: Define the detailed specifications

1. What are the critical components of the result statement, and how is this indicator responding to these critical components?

2. What terms/words/phrases/acronyms in the indicator need to be explained/specified to ensure a consistent understanding?

Step 9: Define the method of calculation

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number (#)</td>
<td>A straight count</td>
</tr>
<tr>
<td>Percentage (%)</td>
<td>A fraction that provides a proportion multiplied by 100; it measures a number (numerator) in relation to the whole (denominator)</td>
</tr>
<tr>
<td>Rate</td>
<td>A fraction that compares measurements that have different units; it usually involves three pieces of data</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>A number that represents the typical or central value in a data set</strong></td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------------------------------------------</td>
</tr>
</tbody>
</table>

**Calculating Composite Indicators**

1. Single out each of the individual indicator components – the different elements within the indicator that need to be calculated.
2. Decide how each of the individual indicator components is to be calculated;
3. Decide whether all individual indicator components have the same weight or, if one or some of them, have more (or less) weight;
4. Scale their respective weight to define how the composite indicator will be totalled/aggregated.

**Step 10: Define the method of analysis**

1. What specifically do stakeholder needs to know from these indicators?
2. What do you need to be able to report to give these stakeholder what they need to know?
3. Therefore, what are the questions that the analysis of the indicators needs to answer to allow for reporting this information?
4. You should also ask yourself:
   - Is there anything in particular to consider when analysing these indicators?
   - Should this indicator be analysed together with another indicator in order to better understand the results?

**What Next?**

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