Clearly, undertaking problem analysis with different stakeholders generates rich data that informs your understandings and choices about possible project interventions.

**Reflection Opportunity**

1. In your experience of doing assessments, did the problem of “too much information” emerge that hindered the analysis of this information? If so, how might this have been overcome?

2. How do you ensure that different perspectives are respected during analysis?

**Making Decisions About Project Strategy**

Problem analysis, using *problem trees*, is a popular and practical way to make the link between the first steps of project design (assessment and analysis) and the project’s objectives and strategy. One of the advantages of problem trees is that they can be easily transformed into objectives trees. Problem and *objectives trees* provide the basis for making decisions about the project’s strategy and overall design. Specific steps to construct and use a problem tree are found below.

The strategy review step (Chapter III, Section 5) also includes tools for linking decisions about project strategy back to the previous steps of project design (assessment, analysis and setting objectives). You may wish to look ahead to this section – specifically at Table 3.8 (pp. 93-94) – because as you analyze the information and set preliminary project objectives you may also develop ideas about possible project strategies. Reviewing this table now may be useful.

Throughout these steps of analysis, objectives setting and strategy review, it is important for all stakeholders to see clearly how the selected strategy links to the in-depth analysis on the community and situation.

**How To Identify Problems, Do Problem Analysis and Set Objectives**

In addition to reasons listed earlier, problem analysis is a basic and useful method to:

(1) identify the major problems;

(2) determine cause and effect relationships; and,

(3) prioritize what should be addressed through a project’s strategy or intervention. This section will show you how to analyze problems using a problem tree.
Step One: Choosing Problems to Analyze

This is a crucial step! In choosing a problem to analyze always bear in mind that the ultimate purpose is to end up with project objectives and a strategy that are specifically focused on the situation in which you intend to work. Your project design will always benefit if you:

- analyze the problem in the context of the project site or local situation; and
- avoid analyzing problems solely from a national perspective (using mostly secondary data), and then leaping to decisions about a project strategy with no local analysis.

By following this guidance, you should end up with much stronger “situation-specific” project objectives and strategy.

<table>
<thead>
<tr>
<th>Being situation-specific in problem analysis</th>
</tr>
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<tbody>
<tr>
<td>A partner wants to develop a project to continue its current interventions in health care for people living with HIV/AIDS (PLWHA). Yet the problem the partner analyzed in the draft proposal was the high rate of HIV/AIDS in the country. While it was a good analysis of that problem from a national perspective, it did not study the “situation-specific” problem that the partner was seeking to address.</td>
</tr>
<tr>
<td>CRS and the partner were determined to become more analytical about the specific problems and issues facing PLWHA in the context of the project site and around the health care available. They eventually defined the “situation-specific” core problem as “PLWHA in the diocese suffer from poor quality health care.” The analysis then focused on deepening their understanding of why this might be the case. Underlying causes uncovered by project stakeholders revealed a number of relevant factors that they had not previously considered in their existing interventions. These included concerns about the quality and efficiency of health care provision; access to those most vulnerable; and limited health care versus a more holistic approach. This situation-specific analysis formed the basis for a clear and focused project strategy that was extremely relevant to the care needs of PLWHA in that community.</td>
</tr>
</tbody>
</table>

If you started to analyze the data during the assessment process, you may have already focused in on what you think are key issues. This is now an opportunity to confirm your thinking. Regardless of how far along the assessment-analysis spectrum you are, the checklist below can help you sort through all of the information gathered in the assessment.

You can analyze more than one issue. In fact, it is often useful to repeat the analysis for a number of key issues that affect various groups within a community. Analyzing more than one issue helps increase understanding of the interconnections between them.
Step Two: Construct a Problem Tree

Introduce problem analysis by showing a sketch of a tree with its trunks, roots and branches. A problem statement is written next to the trunk of the tree. This is a problem tree: a visual representation of reality. A tree is a powerful analogy for many people, especially those in rural communities. Participants in this exercise will be asked a series of questions that will help them to identify the causes of the problem (the roots) and the effects of the problem (the branches).

**Problem Statement:**
Targeted rural communities suffer from seasonal and transitory food insecurity

**Causes:**
- Limited availability of food
- Inadequate means to purchase food
- Poor utilization of food
- Lack of access to health services
- Poor health environment
- Variable production of staple food crops
- High prices
- Low incomes

**Effects:**
- High mortality rates
- Low life expectancy
- Malnutrition
- Micronutrient deficiencies

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Checklist for Selecting Problems and Needs for Problem Analysis

- **What is the overlap among the four dimensions of need for this community or situation?** In what way do felt, expressed, normative and relative needs converge?
- **What has triangulation shown?** Have different stakeholders consistently uncovered a set of problems or needs?
- **Which problems or needs do various project stakeholders, especially the poorest and most vulnerable groups, refer to repeatedly and intensively?**
- **If you have used the IHD framework in the assessment, ask “what is stopping or preventing households from maximizing, increasing or diversifying their assets?”**
Define the Problem Tree Terms

It is important to be clear about the terms and definitions used in the problem tree. The following definitions and examples can be used in your exercises with partners and communities.

**Problem:** A problem is a specific negative situation related to the human condition. A problem is not the absence of a solution because this would presuppose the type of intervention, which may or may not be the most appropriate. Problem trees use problem statements (sentences that contain a “who,” “what,” and “where”) written next to the trunk to launch the discussion of causes and effects.

A weak problem statement might look like this: *Some poor people in parts of Slaviston do not have enough money to provide good health care for their children, who suffer from diseases for which there are available immunizations.* This statement does not specify who is affected or where they are located. It states the problem as the absence of a solution rather than the presence of a problem.

A stronger problem statement is: *High measles mortality rates are found in children under five in urban Slavistan.* You now know who (children under five), what (high rates of mortality due to measles) and where (urban Slavistan), and the problem statement does not presuppose what is the best approach for tackling this issue.

**Cause:** A cause is an underlying factor that exists in the household, community, organization or external environment that has brought about the problem. Drought, inadequate maternal care, or the poor quality of medical service delivery may be causes of the problem of high mortality rates among infants.

**Effect:** Effects are social, environmental, political or economic conditions, usually negative, that result from the problem. One likely effect of high HIV/AIDS prevalence rates among adults is large numbers of orphans. Similarly, lower primary school attendance rates would be an effect of high mortality rates due to HIV/AIDS among productive adults.

**Reflection Opportunity**

Consider this problem statement: “CRS staff need training in project design.”

1. Why is this a weak problem statement?
2. How would you turn this into a stronger problem statement?
Now you understand the terms included in a problem tree, you should be ready to construct one using the instructions below.

### Constructing a Problem Tree in 10 Steps

1. **Draw a large outline of a tree on a blackboard, whiteboard, flip chart or other surface.**
2. **Write the problem statement agreed by those involved next to the trunk of the tree.**
3. **Ask people to identify the causes underlying this problem statement, writing each cause on one index card or Post-It Note. Knowledge of causes can come from personal knowledge as well as information uncovered during the assessment. (Note: Do this on a wall using tape and index cards that can be moved around, rather than straight onto paper. This opens the discussion up to all and prevents it from being monopolized by the person holding the pen. It is usually easiest to use large Post-It Notes if they are available.)**
4. **As causes are identified, ask “But why does this occur?” to identify other lower-level causes that contribute to this particular cause. Using tact and sensitivity, keep asking “But why?” or “What explains this?” until people feel they cannot go any deeper.**
5. **Organize the index cards or Post-It Notes to show the layers of the problem.**
6. **Use one-way arrows to show “cause and effect” relationships between the various causal statements written on the index cards or Post-It Notes. If there is no interrelationship between causes, do not draw a line.**
7. **Review the problem statement again and ask participants to identify the effects of the problem statement, again writing each one on one index card or Post-It Note.**
8. **As effects are identified, ask “And then what happens?” or “What are the consequences?” to identify other effects until all ideas are exhausted.**
9. **Organize the index cards or Post-It Notes to show the layers of the effects.**
10. **Use one-way arrows to show “cause and effect” relationships among the various effects written on the index cards or Post-It Notes.**

### Step Three: Reviewing Completed Problem Trees

These questions can help people to review, correct and further analyze their problem trees.

- Does each cause-effect link (illustrated by arrows) make sense? Is each link plausible? Why or why not?
- How well have the causes gone down to the roots? Are there any unidentified root causes?
- What appears to be the relative contribution of each causal stream (causes linked by arrows leading to the core problem statement) to the problem?
- Do some causes appear more than once? Why is this?
- Which causes show significant influence?
Some practitioners encourage the identification of *key leverage points*. Key leverage points are defined as causes that show important influence or are repeatedly identified across various casual streams. Key leverage points are important when identifying potential objectives since they have the potential for greater change and more impact in resolving the problem described in the problem statement.

The idea of key leverage points is discussed in CRS/WARO’s DAP Manual (Aker, 2004).

**Reflection Opportunity**

Take a project proposal and sketch the problem tree that is described in the proposal.

1. How does it look? Is it lopsided towards causes or effects? Why?
2. Do the review questions listed above suggest any ideas that may be missing? If yes, which?

**Step Four: Transforming a Problem Tree into an Objectives Tree**

An objectives tree is a mirror image of the problem tree. Negative problem statements (from the problem tree) are transformed into positive objective statements within the objectives tree. By doing this, you are taking a step towards identifying the potential strategies that are available for tackling the core problem.

**Turning Problems into Objectives**

*For example, if the problem statement in the problem tree is “high infant mortality,” the objective tree transforms this into the positive objective statement “infant mortality rate is reduced.”*

While the problem tree displays “cause-and-effect” relationships, you will see that the objectives tree shows “means-to-end” relationships as illustrated with the example below.
In most cases, higher-level objectives (such as goals) correspond directly to the problem tree’s core problem statement written next to the trunk of the tree. Other objectives that you have transformed from problems may not always fall into a logical order. You might need to re-order them to put them into a more logical sequence.

Once you have made your objectives tree, review it using the following questions:

- are the positive statements and objectives clear?
- have they been put into a logical and reasonable order that shows means-to-ends logic?
- is there a need to add other objectives?
- how do these objectives differ from those included in the original concept note or the initial Results Framework? and
- what objectives from the concept note should be retained, adjusted, or dropped in light of this analysis?