DESIGN, IMPLEMENTATION, MONITORING, AND EVALUATION OF MENTAL HEALTH AND PSYCHOSOCIAL ASSISTANCE PROGRAMS FOR TRAUMA SURVIVORS IN LOW RESOURCE COUNTRIES:

A USER'S MANUAL FOR RESEARCHERS AND PROGRAM IMPLEMENTERS

(ADULT VERSION)

MODULE 4:

DESIGNING A PROGRAM

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ACKNOWLEDGEMENTS

CONTENTS

ACRONYMS

AMHR	Applied Mental Health Research
BA	Behavioral activation
CBI	Components based intervention
CBT	Cognitive Behavior Therapy
CPT	Cognitive Processing Therapy
CSA	Child sexual abuse
DHS	Demographic health survey
DIME	Design, implementation, monitoring and evaluation
DRC	Democratic Republic of Congo
EBT	Evidence Based Treatment
FG	Focus Group
FL	Free List
GBV	Gender Based Violence
HIN	Health information network
IPT	Interpersonal Therapy for Depression
IRB	Institutional Review Board
JHU	Johns Hopkins University
KAP	Knowledge, attitudes and practices
KI	Key Informant
LMIC	Low and middle income countries
MI	Motivational interviewing
MOH	Ministry of Health
NGO	Non-governmental organizations
OVC	Orphans and vulnerable children
PE	Prolonged Exposure
POFO	Positive Outcome for Orphans Study
PPS	Probability proportional to size
PRA	Participatory rural appraisal
PTSD	Post traumatic stress disorder
R2P	Research to Prevention
RCT	Randomized Controlled Trial
REC	Research Ethics Committee
SEA	Formerly trafficked or sexually exploited or abused
SEARCH	Supporting Evaluation and Research to Combat HIV/AIDS
SES	Social economic status
SMS	Short Message Service

SOW	Scope of Work
SRP	Stress related response
USAID	United States Agency for International Development
TFCBT	Trauma Focused Cognitive Behavior Therapy
VOT	Victims of Torture Fund
WHO	World Health Organization

The Manual for Design, Implementation, Monitoring, and Evaluation of Mental Health and Psychosocial Assistance Programs for Trauma Survivors in Low Resource Countries: A User's Manual for Researchers and Program Implementers has been written to assist researchers and organizations developing and implementing programs among trauma affected populations to 1) identify and measure the impact and prevalence of mental health and psychosocial problems in the populations they seek to serve; 2) develop or adapt appropriate interventions to address these problems; and 3) measure the impact of these interventions. The Manual consists of 6 modules. Collectively, the modules describe a process of program **d**esign, **i**mplementation, **m**onitoring, and **e**valuation (DIME) developed and used by the authors since 2000. The modules may be used in sequence, to follow the life of a project, or as a stand-alone unit to address a specific project need.

- **Module 1** describes procedures for a qualitative assessment to identify priority problems from the local perspective.
- **Module 2** provides guidance in the development and validity testing of tools to measure these priority problems.
- **Module 3** describes population-based assessments to gauge prevalence and severity of the priority problems using the instrument developed in module 2.
- **Module 4** describes a process for overall design of a program to address the priority problems, including design of program monitoring and evaluation.
- **Module 5** outlines the selection, adaptation, and implementation of interventions.
- **Module 6** describes procedures for assessing intervention impacts.

Definition Box

Intervention(s): Service(s)/activity(ies) directly benefitting the client

Program: The intervention(s) and all ancillary activities necessary to support the intervention(s): logistics, finance monitoring and evaluation, etc.

LAYOUT OF THE MANUAL

Modules are presented in narrative form, with extensive use of subheadings. With the exception of text boxes, each section and each paragraph is meant to be read sequentially. Additional material that is useful as examples of concepts or expansion on subjects discussed in the text has been included in text boxes. Examples of study materials which may be adapted for use in an actual study are placed separately as appendices.

Throughout each module, you will encounter a series of symbols and boxes set off from the text. These are meant to draw your attention to an important concept, example, or requirement:

TEXT SET OFF IN RED BOXES WITH THIS SYMBOL INDICATES THAT WHAT FOLLOWS IS A CRITICAL REQUIREMENT OR CONSTRAINT

TEXT SET OFF IN PURPLE BOXES WITH THIS SYMBOL CONTAIN REAL-LIFE EXAMPLES OF THE ACTIVITIES DESCRIBED IN THIS MODULE

TEXT SET OFF IN BLUE BOXES WITH THIS SYMBOL PROVIDE NOTES AND TIPS ON INFORMATION PRESENTED IN THIS MODULE

INTENDED USERS

This manual is primarily intended for researchers and groups responsible for mental health and psychosocial interventions for trauma-affected populations, such as government providers and non-governmental organizations (NGOs).

The methods described in each module are intended to be within the typical budget, resources, and time constraints of organizations that normally focus on implementation rather than data collection. The approach is designed to be used in a limited area among a population with a homogenous language, culture, and similar circumstances. In areas containing populations with a variety of languages, cultures, and environments, the approach described in this manual should be used separately with each group. For this reason, the authors have focused on developing a process that is rapid and relatively inexpensive.

This is meant as a 'user' manual rather than a training manual. It is intended for use in the field by those who have previously received field-based training in its methods (or have similar training experience) and are now leading teams in their own sites. Such persons should either have some prior experience in qualitative and quantitative data collection methods (depending on the module being used) or lead teams with persons who have such experience.

The authors have found that even with prior experience in data collection, individuals and organizations attempting to use the methods described here for the first time will have many important questions during the process that cannot be addressed in the manual itself. Answering these questions as they arise—and developing the skills required for using the approaches in different settings—is best done in a field-based training situation, with direct instruction in the course of supervised use of this approach among a local population. Even after training, organizations using this approach may want guidance and ad hoc assistance.

The authors would be pleased to discuss training and technical assistance with any interested organization or individual.

The manual does not contain detailed descriptions of commonly done research activities, such as quantitative interviewing, partly due to the expectation that organizations have persons experienced in these activities and partly because there are many other manuals available that describe these activities. Instead, the manual focuses on research activities, or ways of doing them, that are different from commonly used approaches. For example, Module 1 contains much more information on interviewing than the other modules because the qualitative methods used in Module 1 are less commonly used than quantitative methods.

THIS MANUAL IS NOT APPROPRIATE FOR 'OFF THE SHELF' USE WITHOUT PRIOR ON-THE-GROUND TRAINING OR SIMILAR EXPERIENCE. THOUGH WHAT IS PRESENTED HERE REPRESENTS WHAT THE AUTHORS HAVE FOUND TO WORK WELL TO DATE, FIELD SETTINGS VARY. USERS OF THE METHODS PRESENTED HERE NEED FIELD EXPERIENCE TO INTERPRET AND ADAPT THESE METHODS TO DIFFERENT SITUATIONS.

The diagram below outlines the steps of the design, implementation, monitoring, and evaluation (**DIME**) process described in this manual. Qualitative data collection (Module 1) is the first step in the process and the diagram indicates which of the subsequent steps (2-8) are informed by qualitative data. A brief description of each step follows.

Figure 1: Steps of the DIME Process

1. Qualitative assessment	5. Program planning
2. Develop draft instruments	6. Develop Interventions
3. Validate instruments	7. Implementation and Monitoring
4. Study Baseline +/- prevalence survey	8. Intervention assessment
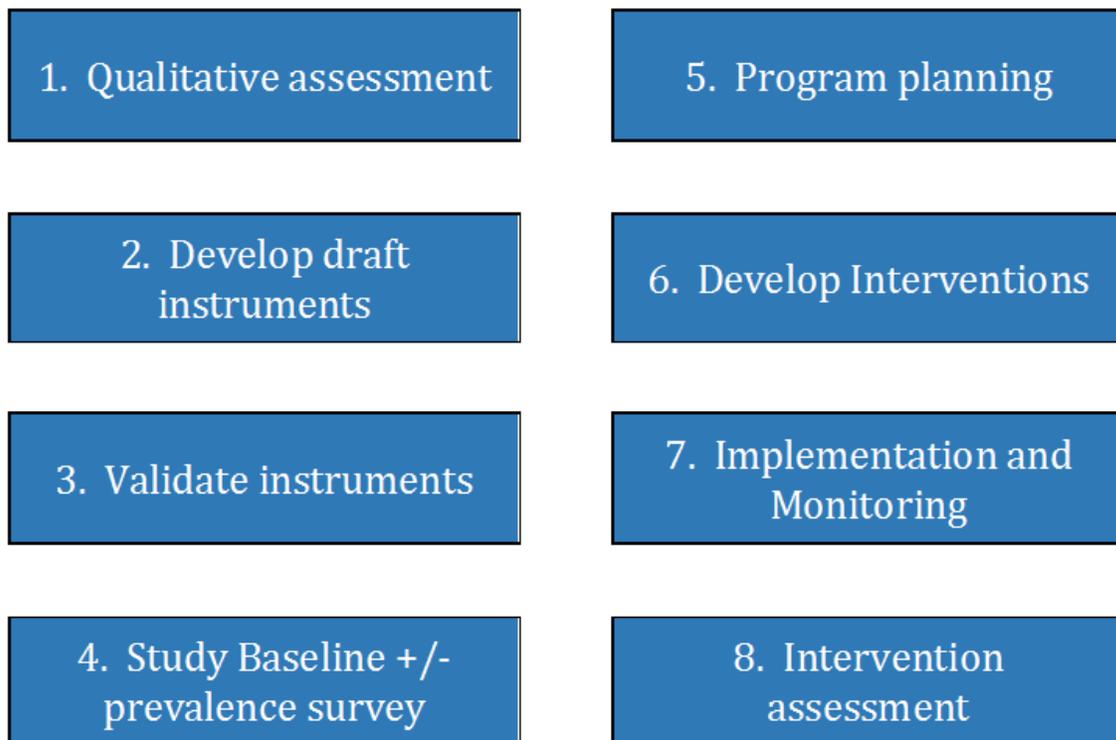
1. **Qualitative Assessment to identify and describe priority mental health and psychosocial problems of trauma survivors: (Module 1)**

   Variations in culture and environment affect how people understand the mental health and psychosocial problems related to experiencing trauma. By *understand,* we mean how these problems are described, how they are prioritized, their perceived causes, and how people currently cope with them. This information is vital in selecting problems that are important to local people, for accurately communicating with them about these problems, and for identifying interventions that are likely to be acceptable and feasible for local people and therefore effective and sustainable.

2. **Develop draft instruments to assess priority mental health and psychosocial problems of trauma survivors: (Module 2)**

   Having decided which problems the program will address, we then draft quantitative assessment instruments to address these problems. These instruments have various uses, depending on the program: community or clinic-based surveys; screening persons for inclusion in a specific intervention program(for programs where not all people will be served); identifying those with severe problems who may need specialized services including referral; and monitoring and evaluating the effectiveness of services by tracking changes in severity and/or prevalence of the problems identified.

   The process of drafting appropriate instruments includes reviewing the published literature for measures that have already been developed for the selected problems and comparing available measures with the qualitative data to select the measure(s) that best match how local people describe the problems. These measures are then adapted to better fit local concepts.

   Drafting includes translation. Terminology suggested by translators often differs from that used by local populations, particularly by poor and uneducated people. Therefore, qualitative data is preferred as the best source for translating key concepts. Employing the words and phrases that local people actually use (as identified in the qualitative data) will improve the clarity of the instruments, thereby improving their acceptability and accuracy. The translators are instructed to utilize the qualitative data to directly translate all signs, symptoms, problems and topics in the instruments that were mentioned by interviewees in the qualitative study using the same words found in the qualitative data. Only where concepts are not mentioned in the qualitative data do the translators themselves choose the appropriate terms.

3. **Validate draft instrument(s): (Module 2)**

   Once translated, the draft instrument(s) must be piloted and tested for ease of use, clarity, acceptance (both by interviewers and interviewees), and accuracy in the field. Accuracy refers to reliability and validity, which in turn refer to whether the instrument gives the same result with repeated use or use by different interviewers (reliability), and whether it measures what it is supposed to measure (validity). Testing involves interviews with members of the target population using the assessment instrument and analyzing the results.

   Validity and reliability testing are particularly important with psychosocial and mental health measures, where assessment is based on interview alone (i.e., there are no laboratory or other tests). A tool that is not accurate can lead to inappropriate inclusion/exclusion of intervention participants as well as incorrect conclusions about need and program impact.

4. **Study baseline +/-prevalence surveys: (Module 3)**

   Both baseline assessments and prevalence surveys are based on the instruments developed in steps 2 and 3. Baseline assessments refer to interviews done using the instrument in order to establish the eligibility of individuals for participation in an intervention program. Prevalence surveys perform the same function at the population level to measure the percentage and numbers of eligible (i.e., affected) persons in the population, and also provide some indication about the variation in severity of problems at the population level.

5. **Overall Program planning: (Module 4)**

   This includes planning the program goals and objectives and the strategy and the type of intervention(s) for achieving these. It also includes the development of process and impact indicators, and the overall program work plan.

6. **Develop interventions to address the identified mental health and psychosocial problems of trauma survivors: (Module 5)**

   The qualitative data on the perceived causes of problems and how those affected cope with the problems are critical to intervention design. Interventions need to address the perceived causes of priority problems (or explain to participants why they do not) in order to make sense and therefore inspire both confidence and cooperation. The more closely interventions can match the ways in which people currently think about and

address the selected problems, the more likely the interventions are to be acceptable to them. Where there are differences, they need to be explained and agreed on by the local population. For example, using counseling to address a problem thought to be caused by poverty will take some explaining.

7. **Implementation and Monitoring: (Modules 4 and 5)**

This refers to implementing and monitoring of the intervention and the overall program. It includes procedures for iterative changes in the planned activities as needed, according to the monitoring data.

8. **Intervention assessment: (Module 6)**.

Upon completion of the intervention, participants are interviewed using qualitative methods to identify potentially important unexpected impacts of the program. They are also re-interviewed using the baseline quantitative instrument, to measure changes in the outcome indicators such as problem severity and function. Where possible, the amount of change is compared with the amount of change experienced by a control group, to determine the true program impact. Module 6 describes the use of a randomized control trial design to evaluate interventions.

MODULE 4

DESIGNING A PROGRAM

4.A. INTRODUCTION TO MODULE 4

4.A.1. PURPOSE AND OVERVIEW OF MODULE 4

The purpose of Module 4 is to describe a process for designing a program to address the problem(s) identified in Modules 1-3. The process uses an adapted version of the Logical Framework or LogFrame to develop a psychosocial or mental health program for a population of interest. After following the steps in this module, program staff should be able to:

1. Decide on the key elements of a program: goal, objectives, intermediate results, outputs, activities, inputs, and critical assumptions
2. Decide on how the program will be monitored and evaluated
3. Develop a GANTT Chart that describes program activities by time

In this module, the following steps are proposed and described in detail:

1. Problem Analysis (Problem Tree → Objectives Tree)
2. Define the Vertical Logic of the program
    a. Project Strategy Summary
        i. Goal
        ii. Strategic Objectives
        iii. Intermediate Results
    b. LogFrames
        i. Outputs
        ii. Activities
        iii. Inputs
        iv. Critical assumptions
3. Define the Horizontal Logic of the program
    a. Objectively Verifiable Indicators
    b. Means of Verification
4. Develop a Network Analysis (Critical Pathway)
5. Develop a GANTT Chart

4.A.2. USING THE LOGICAL FRAMEWORK (LOGFRAME) APPROACH

The Logical Framework or LogFrame approach to program design has been used by many health and development programs since the 1970 (AusAID, 2005; CIDA, 2006; DFID, 2003; NORAD, 1999; Ortengren, 2004; PCI, 1971a; PCI, 1971b; Reinke, 1988b; USAID, 1970). The primary advantages of this approach include:

1. Plan with the end/goal in mind. Before deciding on what will be done, the LogFrame approach directs program designers to decide first on the problem to be addressed and what the program goal will be. Only when these aspects are clear can program designers identify the changes needed to help achieve the goal and address the problem. Working backwards from a defined problem to determine the changes needed to address the problem---before deciding on program activities---helps prevent selecting activities will have little or no impact on the problem at hand.

2. Decide what is essential (vs. what is not). The LogFrame approach helps to visualize the pathway from inputs and activities to the goal of the program. Elements of a program that do not provide value to this pathway are more easily identified and can be removed from the program plan.

3. Describe the project to others in a simple and visual way. The LogFrame includes visual diagrams and tables called a LogFrame matrix. . In visually laying out the project logic, program designers are better able to see for themselves and communicate to partners and others what is being proposed in a program plan.

4. Describe the causal pathway from activities to goals (project logic). The LogFrame approach makes explicit the conceptual framework in which the project activities will address the problem of interest. This helps partners and reviewers critique the plan during the planning process, allowing adjustments that will increase the chance the project will be beneficial and achieve the intended results.

5. Test program logic with critical assumptions. An essential feature of the LogFrame approach is the process of making critical assumptions explicit. These are assumptions about how program activities will lead to desired changes and assumptions about how these changes will contribute to achievement of the program goal. By making critical assumptions explicit, partners and reviewers can identify weaknesses in the program logic that are threats to achievement of the program's objectives and goal.

6. Make an effective and efficient M&E Plan. Another advantage of using LogFrames is that a monitoring and evaluation (M&E) plan is included in the LogFrame matrix. This helps the user develop a streamlined M&E plan focused on watching and testing, during implementation of the program, whether the logic or assumptions of the program design are correct or need adjustment. By making timely adjustments when the M&E activities suggest things are off track, we improve the chance that the program will achieve intended results.

4.B. PROBLEM ANALYSIS

The problem analysis process described in this manual follows two key steps: (1) develop a problem tree to identify root causes of problems; and (2) develop an objectives tree from the problem tree as the basis for a strategy to address the problem. The methods for carrying out each step are described below.

As we want programs to address real-world problems, the starting point in the design process is selecting a priority problem and analyzing its root causes. This approach is intended to keep the focus of program design on the problem rather than on the preferred activities or specialization of the service provider. Analyzing the root causes of the problem helps ensure that program interventions address these root causes, which increases the likelihood that the program will be effective (AusAID, 2005). The methods described in Module 1 are used to identify the problem(s) to be addressed. However, it is not essential that Module 1 be used: any appropriate methods for identifying the problems can be used (AusAID, 2005).

4.B.1. DEVELOP THE PROBLEM TREE

B.1.1. IDENTIFY THE GROUP TO ANALYZE THE PROBLEM

The problem to be explored is selected from the problems identified during the qualitative study. A group of local stakeholders are gathered to analyze the problem. Group members need to be knowledgeable about the problem (AusAID, 2005). Community representatives and persons affected by the problem should be included in the group where possible. Group members need to know why they are being invited to participate, what they will do, and what is expected of them. Large groups can be sub-divided in later stages to work on different components of the problem as identified during this process.

> **Note: Suitable Local Stakeholders**
>
> ✓ Primarily local people particularly knowledgeable about, and/or affected by, the problem.
> ✓ Staff of health facilities in the catchment area
> ✓ Community-based organizations serving PLWHA and/or key populations in the catchment area
> ✓ Religious organizations (churches, mosques, temples, etc.) in the catchment area
> ✓ Any others with special knowledge

B.1.2. RESOURCES NEEDED

The following resources are suggested for developing the problem tree:

- A room with adequate space for participants to sit and move around during active tasks

- A large, empty wall in the room that participants can use to post cards or sticky notes
- Note cards with masking tape (or post-it notes) to enable participants to stick notes to the wall and move the notes around as desired to new positions on the wall
- Markers
- String and masking tape to connect note cards in a sequence (alternatively, if the work is being done on a large chalk board or a wall that can be written on with chalk, use chalk to link the note cards)

B.1.3. ANALYZE THE ROOT CAUSES OF THE PROBLEM (PROBLEM TREE DIAGRAM)

Development of the Problem Tree requires the following steps:

1. Write the problem on a note card (or post-it note) and stick the card high on the wall.
2. Have the group(s) review the qualitative and quantitative data for causes of the selected problem (based on descriptions provided by the qualitative study participants, and how the problem was distributed among informants of the quantitative study).
3. Write the main causes of the problem on note cards and stick them to the wall: (1) under the card with the problem written on it; and, (2) side by side with the other causes.
4. Review the causes. Eliminate duplicates by consensus.
5. Then for each main cause listed, the group (or sub-groups if created) identifies its root causes. Ask, "What leads to this?" for each cause (AusAID, 2005). Place these sub-causes side by side under the cause that is the effect of these sub-causes.
6. For each sub-cause, ask again, "What leads to this?" The process continues until all root causes of main causes or higher level sub-causes are identified.
7. Ask the group to check the logic and hierarchy of the items. Group members can move note cards so that they agree with the logical hierarchy of problems, main causes and root causes.
8. Demonstrate the hierarchy by the position of the cards. Draw chalk lines (or tape string) between cards to identify how root causes are linked to main causes and these to the problem.
9. Copy the problem tree diagram on a piece of flipchart paper (alternatively take pictures of the diagram and/or develop an electronic version of the diagram on a computer).

Appendix 1 includes a diagram of a problem tree as an example.

Problem Tree Example

In the example in Appendix 1, the problem to be analyzed is located at the top and is 'youth leaving the community due to a poor quality of life'. Two main causes were identified for this problem: (1) inability to find jobs and/or have income; and, (2) difficulty reintegrating back into the community after return from abduction. Below these two main causes of the problem are root causes of these two main causes. The root causes the program will address to address the problem are selected and outlined in bold.

In this example, the program has selected a subset of all the causes identified in the exercise. Other causes are not being addressed by this program at this time. An implication of this choice is that the problem is not likely to be fully solved by this program. The program will contribute to solving the problem but without the expectation that all youth will remain in the community. The causal pathway the project has decided to address is the following:

- Youth are not being identified and referred for vocational training → not enrolling in vocational training → not completing vocational training → an inability to find a job or get income
- Community leaders are not informed about counseling available or the need for counseling → youth who have returned after abduction not being referred to counseling → difficulty reintegrating into the community
- Community leaders are not encouraged to conduct reintegration ceremonies → insufficient interest in holding reintegration ceremonies → few or no integration ceremonies at the community level → youth who have returned after abduction having difficulty reintegrating into the community

Note: Causes that are general statements---particularly those that affect many issues not just the problem at hand----can be considered 'overall constraints' and moved to the side of the main problem tree (AusAID, 2005).

B.2. DEVELOP THE OBJECTIVES TREE DIAGRAM

The second step of the problem analysis is to rewrite the problem tree as an objectives tree. This is done by changing the words on the note cards of the problem tree. The words on the cards are changed to restate the problem and causes as if these had all been addressed. For example, a cause that is written 'youth cannot find jobs or get income' would be rewritten as 'improved income (among youth).' The resulting objectives tree diagram is an illustration of the strategy for addressing the problem. An example of an objectives tree diagram based on an earlier problem tree is provided in Appendix 2.

Tip: On the back of each note card in the problem tree, rewrite the statements on the front as if the issue had been adequately addressed (negative statement to a positive statement). Flip each card over and stick it to the wall with the new wording showing on the front. Record the objectives tree diagram on a piece of flipchart paper, take a digital photo, or make an electronic copy on computer of the diagram.

Objectives Tree Example

Appendix 2 provides an example of an Objectives Tree that follows directly from the Problem Tree example in Appendix 1. By changing the problem and root cause statements of the Problem Tree into statements of goals and objectives, the program team can essentially define the program strategy. In this example, the program strategy becomes the following:

- Increase the number of youth being identified and referred for vocational training → increased enrollment in vocational training → more youth completing vocational training → an increased income and a higher quality of life among youth
- Community leaders are informed about counseling available and the need for counseling → youth who have returned after abduction being referred to counseling →more counseling → less difficulty reintegrating into the community and a higher quality of life among youth
- Community leaders are encouraged to conduct reintegration ceremonies → greater interest in holding reintegration ceremonies → more integration ceremonies at the community level → youth having less difficulty reintegrating into the community and a higher quality of life among youth

Given the flow of the tree, an implication is that the program will be sufficient for improving the quality of life among youth. It will contribute to better incomes and less difficulty reintegrating with society but, given other causal factors, it will not completely solve the problems of low quality of life among youth.

4.C. DEFINE THE VERTICAL LOGIC OF THE PROGRAM

C.1. BEGIN TO DEVELOP THE PROGRAM STRATEGY

Using the information gained from development of the Problem and Objectives Trees–information that can be considered a kind of situational analysis—an overall *project strategy* is developed. The project strategy is the left most column of the LogFrame and provides an overview of the entire program from the inputs to the goal. The key elements of the project strategy are the following: (1) Program Goal; (2) Objectives; (3) Intermediate Results; (4) Outputs; (5) Activities; and (6) Inputs. However, detailed LogFrames are developed for each Intermediate Result. How each element of the project strategy is defined and decided on is described below.

C.1.1. DEFINE THE PROGRAM GOAL (PURPOSE)

The *Program Goal* is the ultimate purpose or reason for the program. It reflects the wider impact to which the program is contributing but will not achieve alone. Characteristics of the program goal are:

- The goal fits within the mission of the organization, interests of the donor, and the population of interest
- The goal is not always measurable or changeable through project efforts alone
- The project is not held solely accountable for achievement of the goal
- The project typically works toward only one goal

A typical goal statement may be *"improved quality of life",* or *"improved food security"* of beneficiary populations. The goal is generally a broad statement that is influenced by many factors including the program. For this reason we state that the program contributes to the goal but may not be sufficient alone to achieve the goal.

 If we use the information provided in the problem tree and the objectives tree found in appendices 1 and 2, an appropriate goal for this situation would be *"improved quality of life among youth of the beneficiary population."* This goal is broad and there are many factors that affect quality of life. A typical project can contribute to this goal but is unlikely to be sufficient for addressing the entire problem. In other words, the project is not held solely accountable for achieving this goal. In fact, the program may only be able to measure intermediate results such as improved income.

C.1.2. DEFINE THE OBJECTIVES

A program may have one or more *Objectives.* An objective is defined as a change in the environment and/or in the beneficiary population that the program will achieve (and that will contribute to the Goal). Criteria for objectives include the following:

- Addressing this issue will help achieve the goal
- The objective can be achieved by the program alone
- The program is held accountable for achieving the objective in a measurable way

Although many programs will have similar goals, objectives vary more widely between programs because they are more specific to the situation.

> example   Using the information provided in the problem tree and the objectives tree found in appendices 1 and 2, appropriate objectives for this example situation could include the following: (1) *"Increased income among vulnerable youth";* and, (2) *"Increased number of returned abducted youth who have been reintegrated into their communities".*

C.1.3. DEFINE THE INTERMEDIATE RESULTS

Intermediate Results are changes in the population due to program interventions that will result in the achievement of the objectives (given certain critical assumptions). They consist of changes in what the population has, does, knows, and/or believes. Intermediate results should address at least some of the root causes identified in the Problem Tree Analysis and be reflected at the mid to lower levels of the Objectives Tree.

Program interventions often provide training, education and counseling. What we expect the program beneficiaries to have or do *in a new way* **after** receiving these services—that we expect will lead to achievement of objectives—are intermediate results. They are program results intermediate between the program interventions and the desired objectives; they link the two.

> example   **Example: Objectives**
>
> Based on the problem tree and the objectives tree found in appendices 1 and 2, appropriate intermediate results , by objective, could be:
>
> | Objectives | Intermediate Results |
> |---|---|
> | *Increased income among vulnerable youth* | *Increased number of youths completing vocational training* |
> | *Increased number of returned abducted youth who have been reintegrated into their communities* | *Increased number of abducted children who are referred for counseling* |
> | | *Increased number of reintegration ceremonies held by communities* |

C.2. DEFINE CRITICAL ASSUMPTIONS

Critical assumptions are variables that are out of the program's control but affect program success. For example, for a program that consists purely of providing services through a clinic, whether people come to the clinic is not part of the program but will affect how effective the program will be. Similarly, for a program that focuses on training providers, whether those providers find jobs using those skills is not part of the program but will affect program success. Within the logframe matrix critical assumptions in any row link that row with the previous row below. Therefore, critical assumptions on the objective row refer to whether achievement of the intermediate result on the row below will result in the objective (row above). Critical assumptions on the activity row refer to whether the output below will result in the activity, and so on for each level. Therefore, if the objective is to reduce depression and the goal is to increase quality of life, then one critical assumption linking the two (and recorded on the goal row) might be that function and relationships improve as a result of improvement in depression. This approach to linking critical assumptions with the program strategy is diagramed in figure 3: Reading the Logframe Matrix.

Critical assumptions are generated through discussions with persons with program experience, either locally or with similar programs in other places. For NGOs, this may mean circulating the program design within the organization or to other organizations/persons with program experience. Their suggestions are used to draft the assumptions for each row of the LogFrame matrix. These critical assumptions are then checked by consulting with community, team, and other partners, using the testing process in the box below. This same process is used to revise the Program Strategy column until each entry is associated with reasonable assumptions.

✎ Tip: Testing Critical Assumptions

Question:	Answer -- Action:
If the assumption does not hold, will the next level in the Program Strategy fail to occur?	Yes -- leave it in No -- remove it
How likely is it that the assumption will hold?	Certain or almost certain -- remove it (as it is not really an assumption) Likely -- leave it in Not likely -- redesign program

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C.3. DEVELOP THE PROGRAM STRATEGY DIAGRAM

Because program design is a resource intensive process and developing detailed plans for a strategy that may change is inefficient, it is important to get stakeholder agreement about the program strategy before proceeding. A useful method for communicating and clarifying the overall program strategy is to show the goal, objectives and intermediate results using a visual diagram. Appendix 3 includes an example of a Program Strategy Diagram using the information in the example boxes above.

C.4. DEVELOP A LOGFRAME MATRIX FOR EACH INTERMEDIATE RESULT

C.4.1. DEVELOP A BLANK LOGFRAME MATRIX FOR EACH INTERMEDIATE RESULT

The details of the program design are developed with LogFrame matrices. Because each objective may have several intermediate results, we recommend developing a separate LogFrame matrix for each intermediate result to minimize the amount of detail per matrix. In addition, intermediate results are often different enough that a program will use a different approach to achieve one vs. another. In this situation, it is often simpler and clearer to the reader and user to develop a LogFrame matrix for each intermediate result. Figure 2 below provides an example of a blank LogFrame matrix for one intermediate result with its resulting objective and the goal, building on the previous examples. **The remainder of this section (4.C) and the next (4.D) are focused on completing the empty cells in the matrix, and in this way, completing a LogFrame matrix for each intermediate result.**

Completing the Program Strategy column) provides what is called the 'Vertical Logic' of the LogFrame. The items listed in this column describe the logic of the program in a logical sequence of events starting from the bottom (Inputs) to the top (Goal). However, the logic is developed from the top down in order to help limit thinking about lower level events to those necessary to achieving the immediate level above. This process helps us to: (1) plan with the end/goal in mind; (2) decide on what is relevant; and (3) describe the causal pathway from inputs to the program goal.

Figure 2. Beginning of a LogFrame Matrix for One Intermediate Result: <u>Increased number of youth completing vocational training</u>

Level	Program Strategy	Critical Assumptions	Objectively Verifiable Indicators	Means of Verification
Goal	An improved quality of life among youth of the beneficiary population.	Other factors (e.g. war, abduction) do not occur that would undercut the ability of increased incomes to improve quality of life.		
Objective	Increased income among vulnerable youth	Resources (e.g., tools, raw materials) needed for the vocation are available. There is a demand for the products of the trained youths.		
Intermed-iate Result	Increased number of youth completing vocational training	Youth are capable of learning the vocation/becoming skilled. The vocational training is of good quality.		
Outputs				
Activities				
Inputs				

C.4.2. INSERT OUTPUTS, ACTIVITES AND INPUTS TO ACHIEVE THE RELEVANT INTERMEDIATE RESULT

The items in the LogFrame at the levels of the goal, objectives, and intermediate results describe the **overall** program strategy: how achieving intermediate results will result in achieving the objectives which, in turn, contribute toward achievement of the goal. Below the intermediate results various items describe multiple **separate** strategies for achieving each intermediate result: what outputs are needed to achieve each intermediate result, what activities are needed to create these outputs, and what inputs or resources are needed to carry out the planned activities. Note that while the LogFrame describes an upward logic from inputs to the intermediate result, the development of the LogFrame is carried out in a backward direction from the top down, beginning with describing the outputs needed to accomplish each intermediate result specified in each LogFrame.

C.4.2.1. OUTPUTS

The *Outputs* of a program are the program services received by the beneficiary population. Outputs may be described as counts of the program services received or the number of beneficiaries served.

Example: Outputs

Consider a program that will work with community leaders to identify at-risk youth and match them with a vocational placement in order to increase the number of youth who complete vocational training (i.e., the intermediate result). The service that the program is providing here is one of helping communities identify and refer youth to vocational training. One way to define the output of this service is the **number** of youth who are referred to vocational training---this is the number of beneficiaries (youth) who receive the service.

C.4.2.2. ACTIVITIES

The *Activities* of a program are the services that program staff provide to the potential beneficiaries. In other words, these are the things that people working on the program do to assist beneficiaries (e.g., training, education, and counseling).

Example: Activities

Consider the program in the example box above: program staff members will work with community leaders to identify at-risk youth and match them with a vocational placement. The service that the program is providing here is one of helping communities identify and refer youth to vocational training. The activity in this example can be defined, therefore, as: (1) work with community leaders to identify at-risk youth and match them with a vocational placement; or, (2) help communities identify and refer youth to vocational training.

Tip: Include only **major** activities in the LogFrame rather than **minor** activities. Minor activities are activities that are part of other activities. For example, working with community leaders to identify at-risk youth and match them with a vocational placement can be considered a major activity. However, making an appointment to meet with community leaders (in order to work with them) would be considered a minor activity.

C.4.2.3. INPUTS

Inputs refer to the resources that will be needed to implement the program activities. Typical resources include time, staff, equipment, supplies and funding (i.e., human resources, logistics and finance considerations).

> **Tip:** Include only **major** inputs in the LogFrame rather than **minor** inputs. Minor inputs are part of other Inputs. For example, the trainers needed to conduct training provided by the program can be considered a major input. However, the salary of the trainers would be considered a minor input.

C.4.3. FURTHER COMPLETION OF THE LOGFRAME MATRIX

After identifying the outputs, activities and inputs needed to achieve an intermediate result, further develop each LogFrame by completing the columns shown in Figure 3 below.

Figure 3. Further Development of a LogFrame Matrix for One Intermediate Result including Assumptions: Increased number of youth completing vocational training

Level	Program Strategy	Critical Assumptions
Goal	An improved quality of life among youth of the beneficiary population.	Other factors (e.g., war, abduction) do not occur that would undercut the ability of increased incomes to improve quality of life.
Objective	Increased income among vulnerable youth	Resources (e.g., tools, raw materials) needed for the vocation are available. There is a demand for the products of the trained youths
Intermed-iate Result	Increased number of youths completing vocational training	Youths are capable of learning the vocation/becoming skilled. The vocational training is of good quality.
Outputs	Increased number of youth who are referred to vocational training placements	Transportation exists for youth to placements. It is safe for youth to travel to placements.
Activities	Work with community leaders to identify at-risk youth and match them with a vocational placement	Community leaders are able to identify at-risk youth
Inputs	Trained program staff Transportation Reference materials (adapted, tested)	Suitable staff are available to be hired and trained Communities are accessible (weather, security)

Figure 4 below offers a guide on how to read the LogFrame matrix (adapted from Reinke, 1988b).

Figure 4. Reading the LogFrame Matrix

Level	Description	Key Assumptions
Goal	An improved quality of life among youth of the beneficiary population.	Regarding the relevance of the program to the program goals
Objective	Increased income among vulnerable youth	Regarding the longer term impact of what the program produces
Intermediate Result	Increased number of youths completing vocational training	Regarding the immediate impact of what the program produces
Outputs	Increased number of youth who are referred to vocational training	Regarding what is produced by the services or activities
Activities	Work with community leaders to identify at-risk youth and match them with a vocational placement	Regarding the conversion of inputs into activities and services
Inputs	– Trained project staff – Transportation to communities – Reference materials (adapted/tested)	Regarding availability of inputs on schedule

Vertical Logic (vertical arrow on left side)

Horizontal Logic (horizontal arrows at bottom)

4.D. DEFINE THE HORIZONTAL LOGIC FOR THE PROGRAM

D.1. DECIDE ON OBJECTIVELY VERIFIABLE INDICATORS FOR EACH LOGFRAME MATRIX

Having defined the program strategy statements, we use indicators to measure progress towards achieving the program strategy. At least one indicator is defined for each level of the LogFrame Matrix.

D.1.1. DEFINE INDICATORS FOR EACH ROW OF EACH MATRIX

When defining indicators for each level of the LogFrame matrix, it is important to distinguish between:

- WHAT is to be measured (a specific objective, result, output, activity or input)
- HOW it will be measured (indicators)

According to Mayoux, there is no one given set of 'correct indicators' for assessing a particular level of the LogFrame; rather, there is a range of possible signs, symptoms or hints by which achievement can be measured with varying degrees of certainty [Mayoux, 2001]. Below are the SMART criteria or characteristics for development of indicators [Doran, 1981] :

SMART CRITERIA/CHARACTERISTICS OF INDICATORS		
S	Specific	• Specific to each row of the LogFrame • Reflects only things the program intends to change • Avoids measures that are largely subject to external influences
M	Measurable and comparable	• Precisely defined so that interpretation is unambiguous • Objective and reliable, independent of who is collecting the data • Comparable with expectations, targets or standards
A	Achievable	• Sensitive to change during life of program

R	Relevant and easy to collect	• Relevant to a level on the program LogFrame • Feasible to measure within a reasonable time and cost
T	Time-bound	• Describes how much change is expected by when

When defining indicators, give preference to standard indicators from existing sources. However, where these are not suitable, create new indicators to better match program needs. Logistics and finance personnel can often provide indicators for inputs (e.g., burn rate indicators). Figure 5 below describes possible indicators for the example LogFrame matrix.

Figure 5. Format and Possible Indicators for use with an Example LogFrame Matrix for One Intermediate Result including Possible Indicators: : Increased number of youth completing vocational training

Level	Typical Format for Indicators	Possible Indicators
Goal	Indicates a better quality of life (QOL) of the population being served (than would have occurred without the program). May take the form of a score. Otherwise, formulation is flexible. Possible format: • [# or %] of [population or group] who have achieved a target level of [QOL status] • Mean value of a [QOL status] measure among a specific population	Mean increase (score) in QOL status of vulnerable youth who were referred to vocational placement since (the time before entering vocational placement)

Figure 5. Format and Possible Indicators for use with an Example LogFrame Matrix for One Intermediate Result including Possible Indicators: : <u>Increased number of youth completing vocational training</u>

Level	Typical Format for Indicators	Possible Indicators
Objective	Indicate status and changes in the population being served or the environment that will contribute to achievement of the Goal. This may include improving certain health behaviors, or status related to function, economic, health or nutrition. May take the form of rates or ratios. Otherwise, formulation is flexible. Possible format: • [# or %] of [population or group] who have achieved a target level of [health, health behavior, function, economic, or nutritional status] • Mean value of a [health, social, economic, status] measure among a specific population	Pct. (%) of vulnerable youth who were referred to vocational placement and who report being currently employed. • Mean increase (%) in income of vulnerable youth who were referred to vocational placement since (the time before entering vocational placement)
Intermediate Result	Indicate improvement in factors in the population that will result in the population achieving the objective. Factors may include improved knowledge, behaviors, abilities, or skills among the beneficiary population Possible format: • [# or %] of [population or group members] who [know/believe/do] [specific knowledge/ attitude/skill/behavior]. • Mean value of change of an intermediate factor [knowledge/behavior/ability/ skill/attitude] among a specific population	Pct. (%) of vulnerable youth who were referred to vocational placement and who completed vocational training •
Outputs	Indicate the nature, amount, or quality of products and services produced by program staff and received by program beneficiaries in a given time. Typical format: [# or %] of [products or services] that beneficiaries received of [specified] quality [usually by a certain time].	• Number of vulnerable youth receiving a vocational training placement

Figure 5. Format and Possible Indicators for use with an Example LogFrame Matrix for One Intermediate Result including Possible Indicators: : <u>Increased number of youth completing vocational training</u>

Level	Typical Format for Indicators	Possible Indicators
Activities	Indicates that an activity the program is supposed to provide has been provided (of sufficient quality) Typical format: [# or %] of [products or services] provided of those that should have been provided of [specified] quality [usually by a certain time]	Number of communities where the program has operated to place youth in a vocational training program.
Inputs	• Burn rates for funds • Delivery, distribution of supplies, equipment, personnel	Pct. (%) of communities where the program has operated and where at least two community leaders helped identify at-risk youth for placement in a vocational training program.

D.1.2. DECIDE WHICH INDICATORS WITHIN EACH MATRIX WILL BE GIVEN PRIORITY

There may be many possible indicators for each level of the LogFrame matrix. To maintain an efficient and streamlined monitoring and evaluation system, limit the number of indicators at each level to one or two. Give priority to indicators that are able to quickly identify a problem in the system if performance on the indicator does not achieve expectations. This suggestion follows the principle of *management by exception,* where one limits scarce management resources to focus on key indicators of an exception to expectations. The rationale of limiting data collection to a few key indicators that flag emerging problems is that it frees resources to identify causes of problems and implement solutions and problem solving steps (Reinke, 1988a).

D.2. DETERMINE THE MEANS OF VERIFICATION (DATA SOURCE) FOR EACH INDICATOR

D.2.1 IDENTIFY EXISTING DATA SOURCES THAT CAN BE USED TO MONITOR INDICATORS

It is important to plan how each indicator will be assessed. The first question to answer is: *Where will the program get the data needed to calculate indicators?* Common data sources for indicators include the following:

- Program records
- Government statistics (as is, or adapted)
- Household surveys
- Interviews with program participants (clients)
- Service (eg, medical) records or logs

The table on the following page describes common data sources by level of the LogFrame matrix.

Level	Common Data Sources
Goal	• Sample surveys • Government routine statistics (including vital events & surveillance reports) • Government Census • Medical records/logs • Client interviews
Objectives	• Sample surveys • Government routine statistics (including vital events & surveillance reports) • Government Census • Medical records/logs • Client interviews
Intermediate Results	• Sample surveys • Government routine statistics (including vital events & surveillance reports) • Government Census • Program records • Medical records/logs • Client interviews
Outputs	• Program records (e.g., beneficiary lists)
Activities	• Program records (e.g., training reports) • Program special studies (e.g., focus groups, KI interviews, Exit interviews)
Inputs	• Program records • Program Financial reports • Program Organization chart

D.2.2. ADJUST INDICATOR DEFINITIONS AND/OR DATA SOURCE SO THE INDICATOR CAN BE MEASURED

Selection of both indicators and data sources for each row in the logframe are done together. This is because if a suitable data source cannot be found for an indicator, the indicator must be abandoned and a new one found. Data sources associated with indicators for inputs, activities, and outputs, and (sometimes) intermediate results, should be suited for frequent use. This usually means a data source that is relatively cheap and easy to use. An ideal situation is to use

or adapt an existing information system, as this requires less time and money and is more likely to be a sustainable source of data for indicators.

Figure 6 below describes the tradeoff between the cost and complexity of data sources used to measure program indicators. Usually the data sources for input, activity, and output indicators are on the left side of the curve (less costly and complex), whereas intermediate result, objective and goal indicators are to the right. Generally, the further to the left a data source is, , the better (while remaining suitable for measuring the indicator), as this is a more efficient use of scarce management resources.

Figure 5. Tradeoff between cost and complexity of data sources (source: CRS)
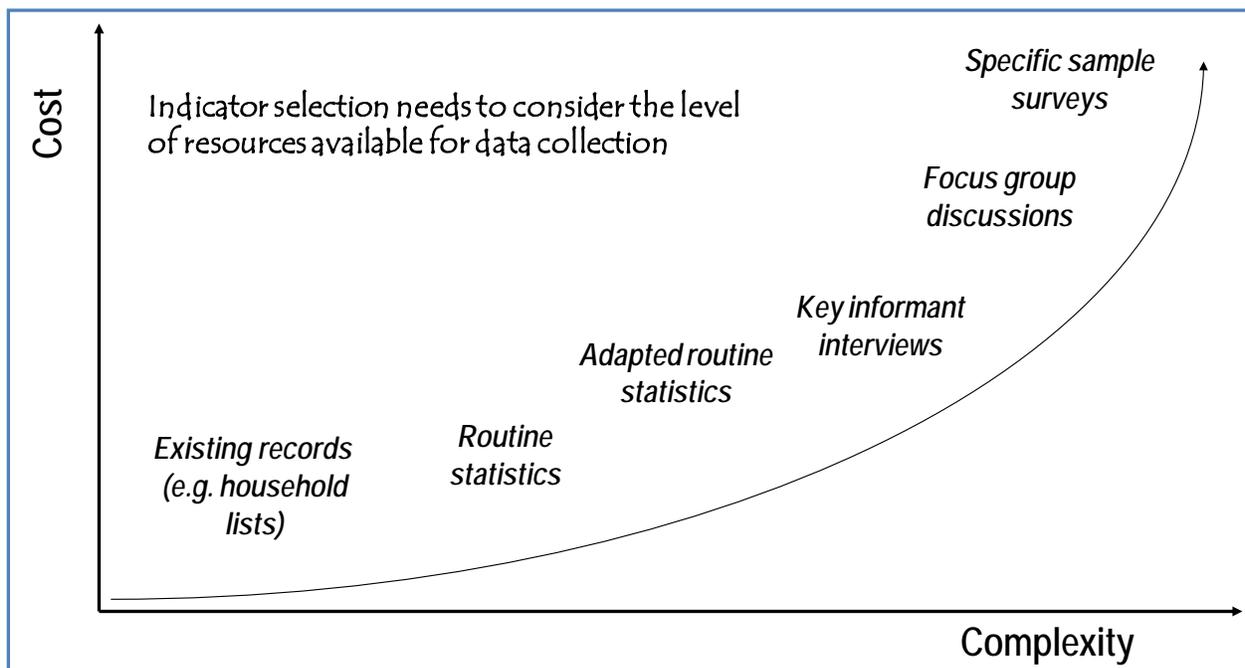
SD.2.3. IDENTIFY NEW INFORMATION SYSTEMS THAT MUST BE DEVELOPED IN ORDER TO MONITOR OTHER INDICATORS

If an existing information system is not available for a desired indicator—and the desired indicator cannot be substituted with another indicator that **can** be derived from an existing information system—a new information source may have to be developed. For example, programs frequently develop a household survey where existing household surveys either do not exist or are not able to be disaggregated down to the program level. For example, a survey may be available that only disaggregates to a province or regional level whereas the program needs data disaggregated to the level of a district or municipality. Or, a survey is already regularly being performed but is scheduled to be conducted at times that do not match the beginning and end of a scheduled program.

Some desired information systems (such as a census or vital event registry or surveillance system) may be beyond the means of the program to develop due to cost and/or complexity. In these cases, a program may need to use an indicator that is less valid but more feasible, or lobby to increase the budget to cover costs of the system and technical assistance.

Following are some brief case examples that illustrate indicators and data sources for different types of programs.

Case example 1: Integrating mental health care into primary health care facilities for conflict-affected populations

Mental illness carries stigma in many societies. Persons who decide to be screened or treated for mental health problems often bypass nearby health facilities to seek services at more anonymous sites, such as hospitals in urban centers. The distance people have to travel to these sites may be increased when a health system is being rebuilt following conflict. These persons may want to address stigmatized issues at facilities distant from home to avoid being seen by family members or neighbors visiting clinics known to cater to persons with stigmatized conditions; however, this distance is a barrier for regular attendance of therapy. For this reason, ways to address stigmatized conditions closer to home are needed for conflict-affected populations. While mental health services can be integrated into maternal and child health services in a more confidential way, this approach excludes men and, in many places, women who are not married or who do not have children. Unless they are sick, these men and women do not have a 'safe reason' to visit a nearby health facility. Giving these men and women a 'safe reason' might be the approach of a program to help those with stigmatized conditions such as trauma-related mental illness. This might be done through a program to promote and provide preventive health services to adults such as annual or six-month health exams or physicals. During these routine contacts, patients can be screened for substance abuse and mental health, and provided confidential care if indicated. Quantitative measures for this program might include the following: percent of adult population receiving a 'physical' in the last year and percent of patients with a physical in the last year who were screened for mental health. A combination of service records and interview surveys is an appropriate source for these measures.

Case example 2: Improving social support among displaced adults

People displaced by conflict may have experienced potentially traumatic events and also must face the challenges and stressors associated with relocation to a new area or country. Among Iraqi refugees living in Jordan, participation in social support networks was identified as a positive coping mechanism; however, the process of displacement interrupted these social networks for many Iraqis. In addition, discrimination and a lack of job opportunities in Jordan kept individuals from forming new social networks or engaging with family and friends living nearby. Being isolated and afraid to leave one's home increased risk for mental distress and prevented those experiencing distress from seeking help. A home-based psychosocial activities program could be provided to strengthen social connectedness and reduce isolation. The impact of these activities (such as photo journaling or language courses) on psychosocial wellbeing could be evaluated through the repeated longitudinal administration of quantitative measures through interviews with participants. Such measures might include function, social support, and positive coping scales developed using the methods described in these manuals.

Case example 3: Counseling for survivors of torture and systematic violence

Torture and systematic violence have been shown to have a variety of long-term physical and mental health impacts, including symptoms of depression, anxiety, PTSD, and substance abuse. These problems can be compounded by a multitude of other stressors associated with displacement, including fear of detention and arrest when survivors are undocumented and living in a host country; poverty and food insecurity; and difficulty obtaining work. Poor mental health can exacerbate these stressors and contribute to problems at home, school, and in the workplace. In response, a Components-Based Intervention could be introduced, in which counselors work with each client to identify his or her specific mental health problem and develop a plan for treatment. Possible components of such a service could include psychoeducation, relaxation skills, behavioral activation, gradual exposure, live exposure, cognitive reprocessing, and cognitive coping strategies. Quantitative measures for this kind of program might include percent of participants completing therapy, mean change in depression score, or mean change in coping scale score. Data collection methods for these indicators might include service records or interviews with participants.

Figure 7, on the page below provides an example of a completed LogFrame matrix for one Intermediate Result.

Figure 7. Completed LogFrame Matrix for One Intermediate Result including critical assumptions: Increased number of youths completing vocational training

Level	Program Strategy	Critical Assumptions	Indicator	Means of Verification
Goal	An improved quality of life among youth of the beneficiary population.	Other factors such as war, abduction do not occur that would undercut the ability of increased incomes to improve quality of life.	Mean increase (score) in QOL status of vulnerable youth	Random sample survey of youth living in beneficiary communities
Objective	Increased income among vulnerable youth	Resources (e.g., tools, raw materials) needed for the vocation are available. There is a demand for the products of the trained youths.	Mean increase (%) in income of vulnerable youth who were referred to vocational placement since (since the time before entering vocational placement)	Random sample survey of youth referred to a vocational training center
Intermediate Result	Increased number of youths completing vocational training	Youths are capable of learning the vocation/becoming skilled. The vocational training is of good quality	Pct. (%) of vulnerable youth who were referred to vocational placement and who completed vocational training	Random sample survey of youth referred to a vocational training center
Outputs	Increased number of youth who are referred to vocational training	Transportation exists for youth to placements. It is safe for youth to travel to placements.	Number of vulnerable youth receiving a vocational training placement	Program activity records
Activities	Work with community leaders to identify at-risk youth and match them with a vocational placement	Community leaders are able to identify at-risk youth	Pct. (%)of communities where the program has operated and where at least two community leaders helped identify at-risk youth for placement in a vocational training program.	Program activity records
Inputs	Trained program staff Transportation to communities Reference materials (adapted/tested)	Suitable staff are available to be hired and trained Communities are accessible (weather, security)	• Burn rate to date and for each quarter including the current period • Number of vehicles designated for this activity that were operational on the last day of the reporting period.	• Finance reports: expenses / budget • Vehicle maintenance logs

4.E. DEVELOP AN ACTIVITY NETWORK FOR EACH MAJOR ACTIVITY

E.1. LIST TASKS TO BE DONE TO ACHIEVE EACH MAJOR ACTIVITY

Brainstorm all the tasks that need to be completed to accomplish the main activities identified on the LogFrame matrix for each intermediate result. Create a separate list of tasks for each of the main activities. The order that tasks are written down is not important at this stage. Simply list the tasks until no more tasks are identified (Reinke, 1988b). For each task, identify the time that will be required to complete it. In the course of identifying tasks also dentify which other tasks must be completed before each task can be started. For each task, identify the time that will be required to complete it.

Below is an example of a list of tasks for building a clinic (not in any particular order). In this example, the plan is to complete the clinic and begin operations before advertising to the public that the clinic is operational. The estimated time (measured in days) needed to complete each task is indicated. In addition, the preceding tasks—those that need to be completed before a listed task can begin—are identified. This information is key to developing a schedule that lists activities by start time and duration.

Task List by Time and Preceding Task			
Task #	Task	Time (days)	Preceding Task
1	Advise public of clinic availability (advertise)	3	2-8
2	Build building	21	5,6
3	Hire staff	14	5,7
4	Obtain medical supplies	30	5,7
5	Obtain government approval	14	-
6	Obtain funds for building	60	5
7	Obtain funds for recurring costs	60	5
8	Clinic begins operations (after training/testing)	5	2-7

> **IMPORTANT:**
>
> Also develop a list of tasks for key monitoring and evaluation activities. The key monitoring and evaluation data collection activities and indicators are found on the LogFrames for each Intermediate Result. See Figure 6 above.

E.2. DEVELOP AN ACTIVITY NETWORK DIAGRAM FOR EACH LIST (ONE PER MAIN ACTIVITY PER EACH INTERMEDIATE RESULT)

The information provided in the task list above can be diagrammed to support the later development of a schedule. The Activity Network Diagram below (Figure 8) shows the above task list organized by Task Number and the number of days needed for the task (in parentheses). In this diagram, three pathways are identified (A, B, C). This shows that some tasks can be done at the same time (e.g., tasks 6 and 7) and that some tasks need to be done in a sequence allowing for parallel sequences of activities (pathway). The longest pathway is C (113 days); this is the critical pathway (Reinke, 1988b). It is 'critical' in the sense that delays in completing tasks in this pathway must delay the overall program, whereas delays in the other pathways are much less likely to delay the program. This information is helpful to know when developing a work schedule because it shows us the level of flexibility in scheduling and completing the tasks in pathways A and B.

Figure 8. Activity Network Diagram Example. Task number (and number of days needed to complete task) are indicated in each circle. Tasks are shown in sequence (pathways) indicating which tasks are dependent on earlier tasks being completed.
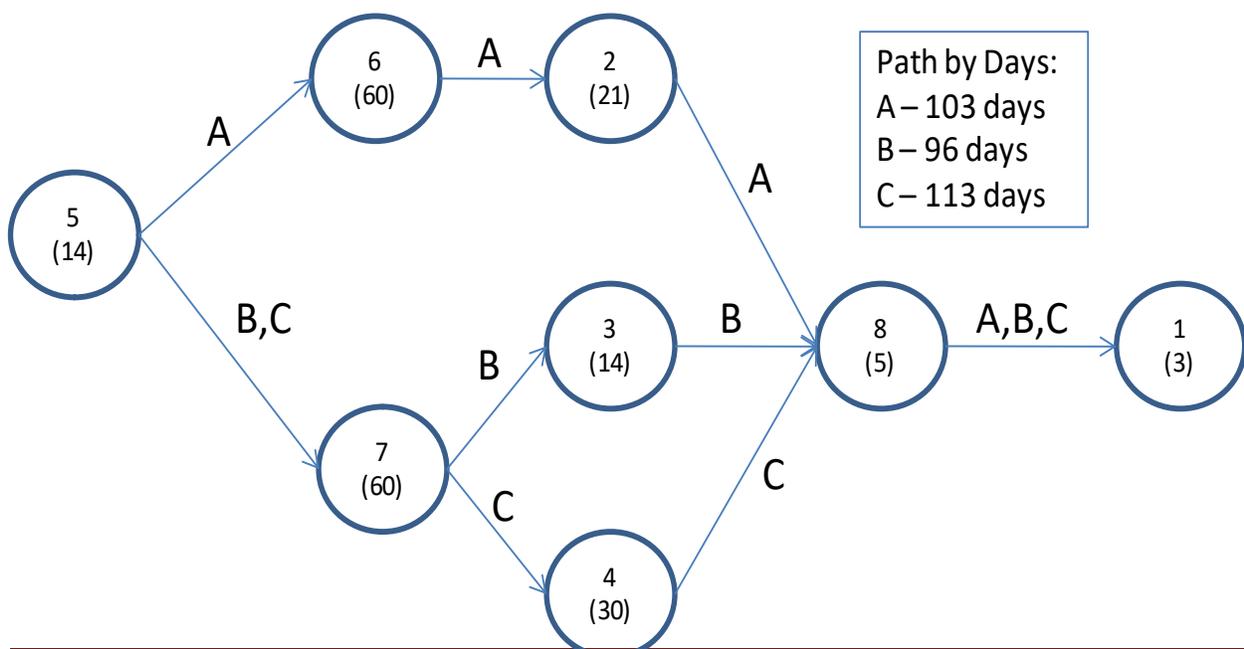
4.F. DEVELOP A GANTT CHART FOR EACH INTERMEDIATE RESULT

F.1. OVERVIEW OF THE GANTT CHART

The GANTT chart is a form of work schedule or workplan that is also a program management tool. It helps plan and monitor the timing and sequence of activities against actual dates. What is different about the GANTT chart—in contrast to the list of tasks and the activity network diagrams described above—is that it fixes activities to beginning and end dates. This allows managers to assign responsibilities for achieving critical tasks at the right times.

F2. DEVELOPING THE GANTT CHART

In order to develop a GANTT chart, we refer back to the List of Tasks (E.1) and the Activity Network Diagram (E.2). Tasks to be done are listed in the rows of a table; the columns are used to indicate dates. We order the rows of tasks by categories and by sequence and note the time each task will take. Then we assign beginning and end dates to each task and display the tasks visually by connecting the beginning and end dates with a graphic device (line/bar). See Appendix 4 for an example.

Below are some characteristics or tips for creating the GANTT chart:

- One row per task (no more than 20)
- Tasks are taken from the List of Tasks
- Order of tasks is taken from the Activity Network Diagram
- Time units used for the columns are typically weeks, months, or quarters
- Each row shows when a task begins and ends using a graphic device (colored/patterned line or bar or X).
- Can include a column of who is responsible for the task (recommended)
- Usually reviewed and updated every few weeks

IMPORTANT:

The monitoring and evaluation plan activities need to be included on the GANTT chart. The monitoring and evaluation plan can be derived from the LogFrames for each Intermediate Result. See Figure 6 above for Indicators and Means of Verification. The plan for carrying out routine or special data collection activities (e.g., household survey) also needs to be included on the GANTT chart in a way that indicates time for planning, training, conduct and analysis of data and data collection activities.

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PROBLEM TREE

```
                    ┌──────────────────────┐
                    │  Youth leaving due to │
                    │  poor quality of life │
                    └──────────────────────┘
                               ↑
          ┌────────────────────┴────────────────────┐
┌──────────────────────┐              ┌──────────────────────┐
│ Unable to find jobs,  │              │ Difficulty reintegrating │
│       get income      │              │ into community after     │
│                       │              │ return from abduction    │
└──────────────────────┘              └──────────────────────┘
          │                    ┌──────────────┴──────────────┐
┌──────────────────────┐  ┌──────────────────────┐  ┌──────────────────────┐
│  Not completing       │  │ Returned abducted     │  │ Communities not       │
│  vocational training  │  │ youth not referred to │  │ holding reintegration │
│                       │  │ counseling            │  │ ceremonies            │
└──────────────────────┘  └──────────────────────┘  └──────────────────────┘
          │                         │                          │
┌──────────────────────┐  ┌──────────────────────┐  ┌──────────────────────┐
│  Not enrolling in     │  │ Community leaders     │  │ Communities do not    │
│  vocational training  │  │ not informed about    │  │ have sufficient       │
│                       │  │ counseling available  │  │ interest/resources to │
│                       │  │ or need for counseling│  │ hold reintegration    │
│                       │  │                       │  │ ceremonies            │
└──────────────────────┘  └──────────────────────┘  └──────────────────────┘
          │                                                   │
┌──────────────────────┐                          ┌──────────────────────┐
│  Not being identified │                          │ Communities leaders   │
│  and referred for     │                          │ and institutions not  │
│  vocational training  │                          │ encouraged to conduct │
│                       │                          │ reintegration         │
│                       │                          │ ceremonies            │
└──────────────────────┘                          └──────────────────────┘
```

OBJECTIVE TREE

```
                    ┌─────────────────────────┐
                    │  Improved quality of life│
                    │      among Youth         │
                    └─────────────────────────┘
                                 ▲
              ┌──────────────────┴──────────────────┐
   ┌──────────────────┐              ┌──────────────────────────┐
   │ Improved income  │              │   Increase number of     │
   │                  │              │   youth reintegrated     │
   └──────────────────┘              │   into the community     │
                                     └──────────────────────────┘
```

Improved quality of life among Youth

Improved income

Increase number of youth reintegrated into the community

Increase number youth competing vocational training

Increase number of returned abducted youth referred to counseling

Increase number of communities that held reintegration ceremonies

Increase number youth enrolling in vocational training

Increase number of community leaders informed about counseling available & need for counseling

More communities have interest/resources to hold reintegration ceremonies

Increase number youth referred for vocational training

Communities leaders and institutions have been supported to conduct reintegration ceremonies

```
          ┌─────────────────────────────────────┐
          │  Goal: Improved quality of life among │
          │               youth                   │
          └─────────────────────────────────────┘
                          ▲
          ┌───────────────┴───────────────┐
          │                               │
┌──────────────────┐        ┌──────────────────────────┐
│ O1. Increased    │        │ O2. Increase the number  │
│ income among     │        │ of abducted children who │
│ vulnerable       │        │ have been reintegrated   │
│ youth            │        │ into their communities.  │
└──────────────────┘        └──────────────────────────┘
        ▲                            ▲
        │              ┌─────────────┴─────────────┐
        │              │                           │
┌──────────────┐ ┌──────────────┐ ┌──────────────────┐
│ IR1.1 Increased│ │ IR2.1 Increased│ │ IR2.2 Increased │
│ number of youths│ │ number of abducted│ │ number of       │
│ completing     │ │ children who are│ │ communities that have│
│ vocational training│ │ referred for counseling│ │ held reintegration│
│                │ │                │ │ ceremonies      │
└──────────────┘ └──────────────┘ └──────────────────┘
        ▲              ▲                     ▲
        └──────────────┴─────────────────────┘
┌─────────────────────────────────────────────────────────┐
│   Project Interventions (inputs, activities, outputs)    │
└─────────────────────────────────────────────────────────┘
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The GANTT Chart below was developed for an annual workplan of a program providing vocational training for youth to improve their income and quality of life. The first column indicates the main tasks related to the program. The other columns indicate timing of the task with four quarters provided for the year.

		YEAR 1, QUARTER:			
ANNUAL WORKPLAN FOR YOUTH TRAINING BY ACTIVITY/TASK		**1**	**2**	**3**	**4**
1	Assess available training materials, and design, implement and evaluate culturally and linguistically appropriate training activities				
	a Identify & adapt existing training materials	▓	▓		
	b Train trainers			▓	▓
	c Carry out training			▓	▓
2	Collaborate with community leaders to identify at risk youth	▓	▓	▓	▓
3	Assess local program needs and use findings to upgrade plans/strategy	▓			
4	Conduct evaluation		Not Expected in Year 1		
5	Review and analyze program data, and disseminate findings				▓
6	Develop, adapt or organize communication materials in appropriate local languages, for informing the community about the program	▓			
7	Facilitate the organization and procurement of transportation for youth to job placements	▓	▓	▓	▓
8	Identify job placements for youth with vocational training	▓	▓	▓	▓

Note that the third quarter shows five (5) activities being carried out with one (1) new activity starting in that quarter. This might indicate to managers a potential problem in capacity of the program to do so many activities, and should lead to checking assumptions about what resources will be required by the program to complete so many activities simultaneously. In contrast, the second quarter shows only four (4) activities being carried out: can some tasks be shifted to this quarter?