

PM4NGOs

Project DPro

Project Management for Development Professionals Guide

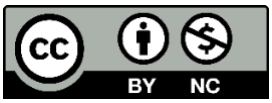
PMD Pro – 2nd Edition

Publisher

© Copyright 2020 PM4NGOs
DPro, PMD Pro and their symbols are trademarks of PM4NGOs.

ISBN: 978-1-7345721-0-0

This work is licensed under the Creative Commons Attribution NonCommercial 4.0 International License.
To view a copy of this license, visit http://creativecommons.org/licenses/by-nc/4.0/.



Users are free to copy/redistribute and adapt/transform for non-commercial purposes.

Version information:

This is the **Project DPro Guide**
Project Management for Development Professionals Guide (PMD Pro).

2nd Edition, March 2020.

Acknowledgments

The Project DPro (PMD Pro) 2nd Edition was developed through the support of a variety of experts who contributed to the creation, editing, review, and translation of the guide. Among these contributors, we extend special thanks to Adriano Santos, Aime Loando, Aishwarya Rana, Amanda Fleetwood, Andressa Trivelli, Barbara Basso, Brandy Westerman, Chris Cattaway, Clement Chipokolo, Corey Walsh, Delia Urrutia Ruiz, Don McPhee, Dov Rosenmann, Edson Marinho, Emanuele Militello, Jack Armstrong, Gabrielle Bielen, Hazem Zeitoun, John Cropper, Juan Manuel Palacios, Kim Kucinskas, Kimberly Johnson, Lisa Robbins-Garland, Maggie Korde, Mahoudo Jules Aimé Bonou, Mark Nilles, Maureen MacCarthy, Mazen Husseiny, Mike Culligan, Mohammad Zeitoun, Nichola Harper, Oliver Carrick, Oliver Filler, Peter Marlow, Raed Al Jundi, Richard Pharro, Ryan LaPrairie, Sarah Cashore, Terver Kuegh, Thomas Dente, Tikajit Rai, Trevor K. Nelson, William Gustave, and Zaid Qardan.

Many professionals from the DPro+ Community contributed through by sending us suggestions, answering surveys, and providing feedback, to whom we would like to thank. We are also indebted to many organizations whose documents and materials were referenced and adapted for use in the Project DPro Guide.

Lastly, this activity would not have been possible without the leadership of Amanda Fleetwood. It was only through her inspiration, dedication, and technical guidance that this effort was possible.

Trevor K. Nelson

on behalf of the Board of PM4NGOs

Contents

Preface **12**
The Story of PM4NGOs 12
The History of the PMD Pro 12
The Evolution of the PMD Pro 12
Project DPro or PMD Pro? 13

SECTION 1. INTRODUCTION TO THE PROJECT DPRO GUIDE **14**

1.1 Introduction **14**
1.1.1 Structure of the Project DPro Guide 14
1.1.2 Changing the World Through Projects 15
1.1.3 Managing Projects in the Development and Humanitarian Sectors 16
1.1.4 Why Does Project Management Matter? 18
Agents of Change 18
Context 18
Accountability 19

1.2 Defining Terms **20**
1.2.1 Project Management 20
1.2.2 The Triple Constraint 21
1.2.3 Program and Portfolio Management 23
Program Management 23
Portfolio Management 24
1.2.4 Where do projects come from? 25
1.2.5 The Principles of Project Management 27
1.2.6 Project manager Competencies 28
The Art and Science of Project Management 28
The Project DPro Project Management Competency Model 30
1.2.7 Phases in Development and Humanitarian Projects 32
1.2.8 The Project DPro Phase Model 33
Project DPro Phases 34

1.2.9 Decision gates 36
1.2.10 How the Phases are Organized 40

SECTION 2. PROJECT DPRO PHASES 41

2.1 Project Identification and Definition 41
2.1.1 Introduction 41
2.1.2 Key Outputs 43
Stakeholder Analysis 43
Project Logical Frame 43
Project Proposal 43
High-Level Project Charter 44
2.1.3 Who is Involved in this Phase 44
2.1.4 What Does this Mean in Practice 45
Resource Mobilization and Participation of Stakeholders 45
Decision Gates 45
2.1.5 Inputs 46
2.1.6 Process 46
Definition of Needs 46
Collecting Data 47
Types of Data 48
Triangulating Data 51
Needs Analysis 53
Current State Analysis 53
Stakeholder Analysis 53
Future State Analysis 59
Project Intervention Logic 62
High-Level Analyses (Estimations) 69
Risk Analysis 70
Human Resource Analysis 71
Supply Chain Analysis 72
Financial Analysis 73

Sustainability Analysis 73
Theory of Change 74
Draft Project Charter 75
Project Proposal (Project Design Documents) 75

2.2 Project Set Up 77
2.2.1 Introduction 77
2.2.2 Key Outputs 78
Project Charter 78
Comprehensive Risk Register 78
Stakeholder Engagement Strategy 78
Project Launch 79
2.2.3 Who is Involved in this Phase 79
2.2.4 What Does this Mean in Practice 79
Decision Gates and Stages 80
Internal Controls 81
Stakeholder Engagement 81
2.2.5 Inputs 81
2.2.6 Process 81
Risk Analysis 81
Risk Assessment 82
Risk Response 84
Risk Monitoring and Control Strategy 86
Stakeholder Engagement 86
Project Governance Structure 87
Planning Framework 91
MEAL Framework 93
Framework for Monitoring 93
Framework for Evaluation 93
Framework for Accountability and Learning 93
Information and Knowledge Management 94
Project Charter 94

Project Launch 95

2.3 Project Planning 97

2.3.1 Introduction 97

2.3.2 Key Output 99

Implementation Plan 99

2.3.3 Who is Involved in this Phase 100

2.3.4 What Does this Mean in Practice 101

Accountability 101

Control Mechanisms 101

Rolling-Wave Planning 102

Decision Gate Process and Plan 102

2.3.5 Inputs 103

2.3.6 Processes 103

Schedule Planning 103

Scope of Work 104

Constraints and Risks. 106

Step 1: Activity Definition 107

Step 2: Activity Sequencing 110

Step 3: Activity Resource Estimating 111

Step 4: Activity Duration Estimating 114

Step 5: Schedule Development 115

MEAL Planning 118

Monitoring 118

Evaluation 118

Accountability and Learning 120

The MEAL Plan 120

Internal Controls 121

Communication and Stakeholder Engagement Planning 122

Roles and Responsibilities Planning (RACI) 124

Supply Chain Planning 125

Human Resources Planning 126

Stage Plans 127
Sustainability Planning 128
Closure Planning 129

2.4 Project Implementation 131
2.4.1 Introduction 131
2.4.2 Key Outputs 132
2.4.3 Who is Involved in this Phase 132
2.4.4 What Does this Mean in Practice 133
2.4.5 Inputs 133
2.4.6 Processes 133
Managing People 133
Managing the Project Schedule 134
Managing the Budget 136
Managing Risks 141
Managing Issues 141
Monitoring, Evaluation, Accountability, and Learning (MEAL) 143
Monitoring 143
Evaluation 145
Accountability 145
Learning 145
Managing Change 146
Managing the Supply Chain 148
Procurement Management 148
Logistics Management 149
Asset Management 150
Project Sustainability Plan 151

2.5 Project Closure 152
2.5.1 Introduction 152
2.5.2 Key Outputs 155
2.5.3 Who is Involved in this Phase 155

2.5.4 What Does this Mean in Practice 155
2.5.5 Inputs 156
2.5.6 Processes 156
Sustainability Plan and Handover 156
Reporting 158
Project Closure Procedures 159
Contract Closure 159
Financial Closure 160
Administrative Closure 161
Project Evaluations 161
Lessons Learned 162

SECTION 3. PROJECT DPRO PRINCIPLES 165

3.1 Principle: Well-Governed 166
3.1.1 What is the Well-Governed Principle and Why Does it Matter? 166
3.1.2 Well-Governed and Identification and Definition 167
Sponsor, Board, Steering Committee 167
Alignment with Program, Portfolio Structure 167
3.1.3 Well-Governed and Setup 167
Governance Structure 167
Project Tolerances 167
3.1.4 Well-Governed and Planning 167
Communication 167
Decision Gates 168
Risk Planning 168
3.1.5 Well-Governed and Implementation 168
Issue and Risk Management 168
Change Control 168
3.1.6 Well-Governed and Closure 169
Lessons Learned and After-Action Reviews 169
Authorized Project Charter 169

3.2 Principle: Participatory 170
3.2.1 What is participatory and why does it matter? 170
3.2.2 Participatory and Identification and Definition 170
Data Collection, Needs, and Problem Analysis 171
High-Level Estimates 171
3.2.3 Participatory and Setup 171
Risk Identification and Assessment 171
Project Launch 171
3.2.4 Participatory and Planning 172
Schedule Planning 172
Sustainability Planning 172
3.2.5 Participatory and Implementation 172
Project Change Control 172
Decision Gates 173
Iterative Project Planning 173
3.2.6 Participatory and Closure 173
Lessons Learned and After-Action Review 173
Project Closure Meeting/Event 173

3.3 Principle: Comprehensive 174
3.3.1 What is Comprehensive and why does it matter? 174
3.3.2 Comprehensive and Identification and Definition 174
Stakeholder Identification and Analysis 174
Needs Analysis 175
3.3.3 Comprehensive and Setup 175
Risk Analysis and Planning 175
3.3.4 Comprehensive and Planning 175
Implementation Plan 175
3.3.5 Comprehensive and Implementation 176
Managing Project Components 176
Risk Monitoring, Review, and Updating 176
3.3.6 Comprehensive and Closure 176

3.4 Principle: Integrated 177
3.4.1 What is Integrated and why does it matter? 177
3.4.2 Integrated and Identification and Definition 177
Team Integration 177
3.4.3 Integrated and Setup 177
Risk Integration 177
3.4.4 Integrated and Planning 177
The Triple Constraint Triangle 178
3.4.5 Integrated and Implementation 178
3.4.6 Integrated and Closure 178
Sustainability Plan 178
Lessons Learned and Evaluations 178

3.5 Principle: Adaptive 179
3.5.1 What is Adaptive and why does it matter? 179
Monitoring, Evaluation, Accountability, and Learning 179
Integrated Change Control 180
Decision gates 180
3.5.2 Adaptive and Identification and Definition 181
3.5.3 Adaptive and Setup 181
3.5.4 Adaptive and Planning 181
3.5.5 Adaptive and Implementation 183
Decision gates 183
Issues and Change 183
Lessons Learned 183
3.5.6 Adaptive and Closure 183

SECTION 4. ADAPTING THE PROJECT DPRO 184
4.1 Fundamentals of Adapting 184
4.2 Factors to Consider when Adapting the Project DPro 185

SECTION 5. CHANGES IN THE PROJECT DPRO GUIDE 188

Annex I: Project DPro Competencies 189
PM Technical 189
Leadership and Interpersonal 190
Personal and Self-Management 191
Development Sector Specific 192

Annex II: Project DPro Certifications 193
Project DPro Foundation 193
Project DPro Practitioner 193

Annex III: Project DPro Learning Outcomes 194

Annex IV: Glossary of Terms 206

Annex V: List of Figures 210

Annex VI: List of Tables 212

Annex VII: Project DPro Brand Terms, Conditions, and Communication Guidelines 214

Annex VIII: Reference List 215

Preface

"Growth is never by mere chance; it is the result of forces working together."

– James Cash Penney

The Story of PM4NGOs

The story of PM4NGOs began in 2011 when a group of like-minded individuals from the international development and humanitarian sectors got together with the purpose of creating an entity that would oversee – independently and transparently – the first international Project Management for Development Professionals Guide (PMD Pro). Since 2011, PM4NGOs has been the guardian of PMD Pro Guide and the owner of the certification, reaching organizations big and small across the world.

The motivation behind the establishment of PM4NGOs continues to drive and inspire us to today and is embedded into our vision: *an equitable and sustainable world where social investment achieves the greatest impact*. This vision is woven into the fabric of our organization, from our interaction with stakeholders to the development of new guides and methodologies. It is our mandate to provide all organizations and individuals – from international NGOs to community – based organizations and individuals – with access to professional standards, providing them with the framework and tools to be able to deliver better results for their stakeholders and beneficiaries.

The History of the PMD Pro

In early 2007, a number of NGOs, including Save the Children, Oxfam, Care, World Vision, Habitat for Humanity, CRS, Plan International, Mercy Corps, asked LINGOs (now part of Humentum), a capacity building organization specializing in NGO development, came together to develop sector appropriate and comprehensive project management learning materials for NGOs.

LINGOs set up a working group of NGO specialists, and after consulting widely, concluded that current ways of working across the sector were inadequate. The group tested ideas and approaches, identified learning objectives, and developed an outline of a curriculum for a new project management course. This would set standards and a common language for project management in the NGO sector around the world.

PMD Pro was launched in 2010. Rather than being owned by the LINGOs working group, a new NGO (PM4NGOs) was established to manage and act as the guardian for the PMD Pro.

The Evolution of the PMD Pro

We have learned a lot over the past 10 years about projects, about our stakeholders, and about the sector. The PMD Pro has been the cornerstone of our organization and has grown beyond expectations across the globe. In the past 10 years, we have reached 167 countries and over 22,700 certified professionals – with 75% based in developing countries. Our online community consists of over 21,000 individuals. There are over 40,000 downloads of the PMD Pro Guide to date and multiple NGOs are using the PMD Pro as a foundational standard for project management in their organization.

With the lessons learned from the past 10 years and feedback from the community of practice, in early 2018 we started the process of revising and rewriting the PMD Pro, giving it a "face-lift" to make it more relevant for project managers and teams working in a variety of contexts. This process was further enabled by the launch of the Program Guide for Development Professionals (Program DPro), filling a substantial gap in sector standards and providing a more comprehensive framework for development professionals.

While the essence of the PMD Pro has not changed, there was a need to make changes and incorporate the lessons we learned from the field and from our partners.

The **Project DPro Guide** is geared specifically for projects and those implementing projects. It is a more practical version that provides project management professionals with the core tools they will need to effectively define, design, plan, implement, and successfully close their projects.

Project DPro or PMD Pro?

The second version of the PMD Pro has been rebranded to **Project DPro** to align the terminology with the Program DPro and other best practices and methodologies that have been developed by partner organizations – the **DPro** family.

You will continue to find references, documents, and tools using the PMD Pro term, as it has been adopted by numerous organizations and professionals.

PMD Pro Level 1 **certificates** remain valid and they are lifetime valid. If you are already a PMD Pro certified professional (level 1), you do not need to re-certify or request an updated certificate. PM4NGOs will permanently recognize and confirm the validity of your PMD Pro certificate.

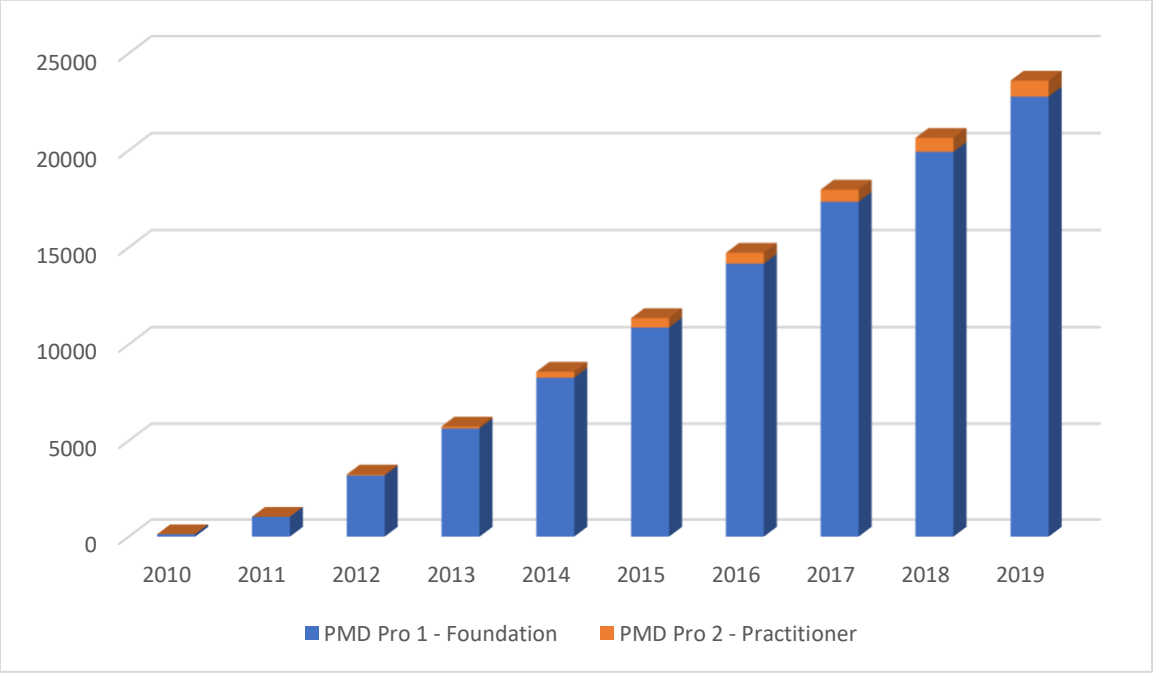


Figure 1: Project DPro Professionals per year – cumulative

SECTION 1. INTRODUCTION TO THE PROJECT DPRO GUIDE

1.1 Introduction

What we cover in this chapter:

- ✓ Projects and Project Management in the Development and Humanitarian Sectors
- ✓ Why Project Management Matters
- ✓ Defining Project, Program, and Portfolio
- ✓ The Project DPro Phase Model
- ✓ Principles of the Project DPro
- ✓ The Project DPro project manager Competency Model

> "Operations keep the lights on, strategy provides a light at the end of the tunnel, but project management is the train engine that moves the organization forward."
>
> – Joy Gumz

1.1.1 Structure of the Project DPro Guide

This version of the Project DPro Guide has been organized to include more detailed information and examples to help project practitioners in the application of the tools and processes. The Project DPro Guide is divided into 5 sections:

1. Introduction to the Project DPro Guide
2. Project DPro Phases
3. Project DPro Principles
4. Adapting the Project DPro
5. Changes in the Project DPro Guide

We will go through each of these sections in detail, providing tools and processes that will help project managers to structure the management of interventions. Though these topics are separated into sections, they do not stand alone but rather interact with one another throughout the life of a project.

The Delta River is a case study used throughout the guide to provide examples of tools and concepts in practice. Additional, comprehensive examples and case studies can be found in the supplementary materials provided by PM4NGOs.

Delta River Case Study Background

A recent assessment found that deterioration of water quality in the Delta River has resulted in depleted crops stocks; reduced production and falling income among farming families; and an increasingly high incidence of water-borne diseases and illnesses, particularly among poor families and children under five.

The current situation is the result of the discharge of fecal waste into the river, household and business waste being dumped into the river, and inadequately treated wastewater in the river and the canal.

Some of the factors contributing to the problem include:

- Low public awareness of the dangers of dumping household waste.
- Low access and use of sanitation facilities for the disposal of fecal waste.
- Corruption and inadequate oversight of the local chemical fertilized industry by the Environment Protection Agency (EPA).
- As a result of low budgets and poor planning by local government even among businesses that treat their waste, treated wastewater does not meet environmental standards.

All these factors have led to high levels of fecal waste and household/business waste in the river, resulting in a deterioration in the river water quality.

1.1.2 Changing the World Through Projects

Would you dig wells to provide potable water to villages? Establish micro-banks that raise women out of poverty? Protect an endangered ecosystem? Rehabilitate a school? Install rural health clinics for underserved communities? Distribute food to the hungry?

Not surprisingly, few people answer: “I would manage projects!”

And yet, millions of development workers change the world every day through activities in agriculture, health care, microfinance, conservation, affordable housing, education, infrastructure and human rights. They all share one thing in common: They change the world through projects!

Development and humanitarian organizations manage their work through projects. Their offices are staffed by project officers who manage project teams. In turn, the project team writes project proposals, develops project plans, implements project activities, monitors project progress, and evaluates project impact. Then, most importantly, beneficiary communities invest their time, energy, and resources in the projects. They trust the projects to build upon their collective strengths, to reinforce their areas of comparative weakness, and to solve the challenges that otherwise might be considered out of their control.

While the livelihoods of hundreds of millions of people depend on the ability of development and humanitarian organizations to deliver project results effectively and efficiently, project management is

seldom identified as a strategic priority for organizations. There tends to be a focus on the technical programmatic areas of projects such as public health, education, child protection, WASH, advocacy, and so on. Organizations tend to hire technical, programmatic specialists who are then asked to manage projects and lead project teams.

These technical, programmatic specialists tend to be very good at identifying treatment protocols for illnesses, developing curricula for schools, designing improved agricultural systems, and analyzing the root causes of poverty. However, it is uncommon to find that they have extensive experience and skills in the area of project management. Are project estimates accurate? Have project risks been anticipated and are they thoroughly controlled? Are project plans comprehensive and detailed? Is project progress monitored at all levels? Are project challenges identified, tracked and addressed? And, are all aspects of the project proactively managed throughout the life of the project? Are the social changes the project wishes to address being achieved?

The purpose of the **Project DPro Guide** is to improve the project management capacity of development and humanitarian professionals, providing a contextualized, balanced, comprehensive, and adaptable body of knowledge and toolkit to help increase the efficiency and effectiveness of projects in the sector.

The Project DPro Guide provides an introductory, independent exploration of project management within the context of the development and humanitarian sectors. It is intended for an audience that includes:

- Project managers and team members who are new to project management;
- Project managers and team members who are new to the development and humanitarian sectors;
- Development sector professionals who intend to pursue professional credentials in project management;
- Public sector team members working on development initiatives in their respective countries and regions;
- Local implementing partners executing projects on the ground;
- Consultants/contract staff operating in the development sector.

1.1.3 Managing Projects in the Development and Humanitarian Sectors

Managing projects in the development and humanitarian sectors is anything but simple. The operating environments are complex, the challenges are numerous, project relationships are complicated, and the cost of failure is high. In short, there is a lot that could go wrong!

The graphic in Figure 2 serves as an illustration of some of the many challenges that could threaten the success of projects. Each image represents an example of what could happen as a result if the design, planning, or implementation of the project is poorly conceived or implemented.

Unfortunately, the list of challenges presented in Figure 2 is not comprehensive. There are many, many more things that could go wrong in projects. For example:

- Are exchange rates stable?
- Are the team dynamics functional?
- Do the monitoring systems provide useful, accurate and timely information?
- Are project suppliers reliable?
- Is there political instability?

- Are there stakeholders who are undermining the project?

To succeed, the project manager must proactively and decisively manage these challenges. Too often, failed projects are attributed as the victims of circumstances that were "out of our control." While this explanation might be valid ***at times***, it is often used as an excuse and fails to acknowledge that the project could have been better anticipated, analyzed, and actively managed.

To retain control of projects – and promote project success – project managers need to develop the skills required to proactively identify the challenges that could impact their project, and to effectively manage their projects even when these challenges occur. These are also the skills we will explore in the Project DPro Guide.

All work that is managed through projects. Whether in the private sector (construction, telecommunication, information technology), development sector, humanitarian sector or public sector, all projects share similar challenges. Some of these challenges are:

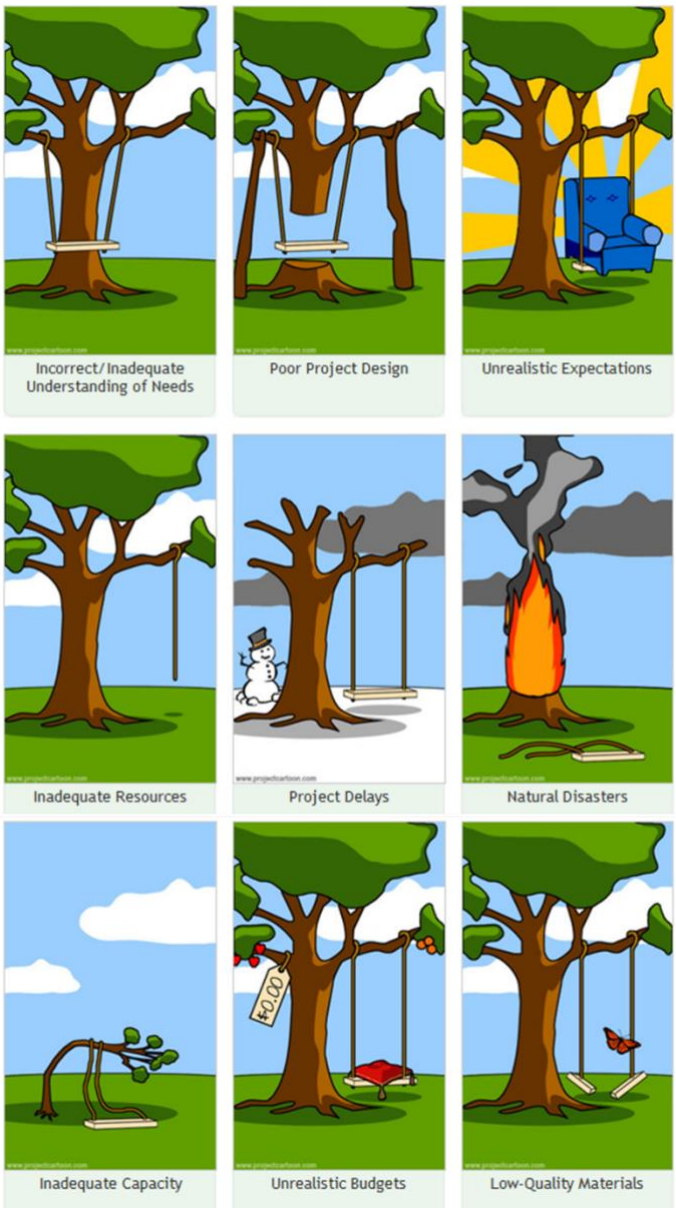


Figure 2: Project Challenges
Source: www.projectcartoon.com

- Designing and delivering project results in the context of time, budget, quality, scope, risk and constraints;
- Developing comprehensive and detailed project plans and managing them through the entire life of the project;
- Managing projects that are often implemented via partners, consortia, contractors, subcontractors and suppliers; and
- Identifying potential risks and establishing processes to avoid and address these risks and ensuring that the intended project benefits are delivered.

While there are similarities that exist between these sectors, there are some characteristics that make managing projects in the development sector unique and especially challenging. Some of these unique characteristics include:

- Development and humanitarian projects are responsible for delivering tangible outputs and also for delivering less tangible outcomes related to promoting social change and/or behavioral

change. Development projects are less likely to focus on delivering concrete products as the ultimate goal of the project and are often service oriented, intended to bring about improvements in the well-being of the project's target populations.

- Development projects aim to address complex problems of poverty, inequality, and injustice.
- Development projects tend to operate in exceptionally challenging contexts (limited resources, high risks, complex procurement networks, unstable political/financial environments, unsafe conditions).
- Project implementation is often managed through a complex array of stakeholder relationships (partner agencies, government ministries, community-based organizations, contractors, global consortia) that have different compliance requirements, perspectives, and expectations.
- The project approach is often as important as the outcomes themselves (including a high priority placed on participation, rights-based approaches).
- Transferring knowledge and learning to the target population is a priority during each and every phase of the project.
- Projects in the development and humanitarian sectors can be subject to changing and challenging funding environments.

1.1.4 Why Does Project Management Matter?

Agents of Change

The development and humanitarian sectors have experienced substantial growth in the past few decades. Any rapid growth comes with "growing pains" as roles and responsibilities within the sectors are identified and clarified. However, our responsibility as professionals within these sectors is to provide the maximum benefit for the targeted individuals, groups, and communities in which the interventions take place.

Projects are the foundation for the sectors. If teams fail to provide the intended outputs at the project level, a domino effect will occur, making it less likely that the contextual, behavioral, and situational changes we seek at the outcome, program, and portfolio levels actually occur. Essentially, projects are the vehicle through which changes can occur. It is vital that the management of projects is effective and efficient so that a foundation is created that enables change. Project management must be approached intentionally, with processes, procedures, tools, and techniques in place that contribute to the maximum change possible for communities and beneficiaries.

Context

We will discuss the difference between projects, programs, and portfolio later in this chapter. This differentiation is important in understanding the context in which projects operate. The focus of the Project DPro is to provide adaptable tools and processes to help those implementing projects on the ground, increasing the likelihood of success.

In 2018, PM4NGOs launched the Program Guide for Development Professionals (Program DPro) to complement the Project DPro Guide and showcase the differences and provide guidance on the ways we approach and manage projects and programs. Often in practice within organizations, there is little

differentiation between the two, the terms are frequently used interchangeably. The Project DPro and Program DPro aim to ensure these differences are clear.

Accountability

There is an increased demand for accountability in the development and humanitarian sector, but it is important to understand that there are different levels of accountability: upward, downward, and horizontal accountability.

Downward Accountability: We are also accountable to the communities and people we are serving with our interventions, ensuring that we are providing high quality services and products in the most cost-effective way possible.

An intervention that is operating within a conflict context may require more thought and analysis when it comes to downward accountability. Conflict sensitive frameworks that include the principle of "do no harm" are important to take into consideration.

Upward Accountability: When we are working with donor and taxpayer funding, we have an obligation to use those funds in a responsible manner, providing the maximum benefit possible. We also have an obligation to the program and portfolio levels in our organization, ensuring that the projects we are implementing align with the strategy of the organization as a whole and contribute to achieving program outcomes.

Do No Harm Principle

Part of downward accountability incorporates the "Do no Harm" principle, which is part of a conflict-sensitive approach to interventions. This principle ensures that our projects proactively assess the ways in which the targeted groups and other stakeholders could be negatively impacted by the intervention. The goal of taking a "do no harm" approach is to "minimize negative impacts and maximize positive impacts of the intervention on conflict."

www.conflictsensitivity.org

Horizontal Accountability: Projects do not happen in a vacuum. They are part of a network of interventions being implemented by various organizations (INGOs, CBOs, private sector CSR projects) within a geographical region. Horizontal accountability takes into considerations the partnerships, relationships, and collaboration efforts we have with our peers and other organizations. We need to consider how our intervention fits into the development and humanitarian picture within a given context and be aware of how these partnerships and collaboration efforts can bring about that higher-level change we are seeking. There are a multitude of different platforms that offer this kind of collaboration, project managers ought to be aware of these platforms and seek to actively participate in them if and when possible.

1.2 Defining Terms

1.2.1 Project Management

As we move forward through the guide, it will be important to understand some of the key terms used[1].

A project is a temporary endeavor undertaken to create a unique product, service, or result[2]. Based on this definition, the purpose of project management is to plan, organize and manage resources to bring about the successful completion of specific project goals, outcomes and outputs.

Projects deliver integrated outputs (deliverables), which should lead to better outcomes (results) for communities and other stakeholders (such as donors and the community). Projects are time bound and focus on requirements to deliver specific benefits for communities in ways that are cost-effective and measurable.

High-quality, comprehensive project management practices are indispensable in helping organizations manage focused, effective, and efficient projects. Within the context of project management, the project manager is responsible for ensuring the overall success of the project.

And yet, while the project manager is responsible for project success, this does not mean that the project manager is personally responsible for completing the work of the project. Instead, the project manager should collaborate closely with an array of stakeholders to ensure that the work of the project is completed. These stakeholders – including members of the project team, implementing organizations, INGO partners, contractors, community groups and others – must work together to design, implement and control all aspects of the project. Like many sectors, project managers in the development and humanitarian sectors often are required to manage stakeholders in a context where there is no formal (hierarchical) authority. It is also common for stakeholders in a single project to have different ethnicities, languages, cultures, and even nationalities. The challenge of managing groups within this context can be especially difficult.

Project Management-Real World Scenario

Project manager Responsibilities

While in an ideal situation, the project manager should not be doing the work of the project, we are aware that this is not always possible or the case. Sometimes, a local organization will not have the resources for a full project team. In other cases, a project manager may be overseeing more than one project. The tools in the Project DPro will help the PM in these situations to better manage their projects. Effectively delegating tasks and communicating with partners, team members, and stakeholders are essential in these circumstances.

[1] Refer to the Glossary of Terms for a more extensive set of definitions of terms used in the Project DPro Guide.

[2] *A Guide to the* Project Management Body of Knowledge (PMBOK Guide), Third Edition, Project Management Institute.

In practice, the project manager's challenge to successfully deliver project results will always take place within the context of project constraints. Historically, there have been three principle elements that constrain a project, which are collectively referred to as the **Triple Constraint** – scope (quality), time, and budget.

1.2.2 The Triple Constraint

To understand the triple constraint principles of project management, picture a triangle (Figure 3) where each side is labeled as follows:

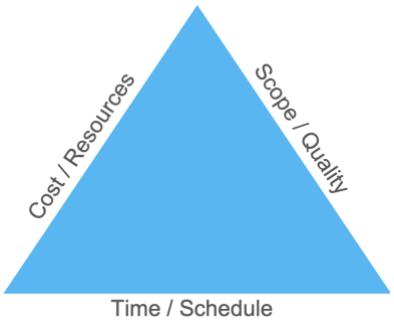


Figure 3: Triple Constraint Triangle

- **Scope/Quality** – What are the products/services that the project will produce? What tasks/activities/work is required to produce these deliverables?
- **Cost/Resources** – What money, materials, and personnel are available to deliver the project product/services and to complete the comprehensive work of the project?
- **Time/Schedule** – What is the amount of time required to complete the all activities of the project?

The job of the project manager is to ensure that the Triple Constraint Triangle stays in balance. The constraints are interdependent, so whenever one of these constraints is restricted or extended, the other constraints will also need to be extended/increased or restricted/reduced.

The Triple Constraint Interdependency

If one side of the Triple Constraint Triangle changes, so do the other two sides. Take, for example, a humanitarian NFI (non-food item) distribution project in which the original scope indicated that 10,000 families would be provided with NFI kits (blankets, soaps, etc.). Suddenly, the project team gets a request to increase the number of families served from 10,000 to 12,000, increasing the number of kits required by 2,000. This is an increase in the scope of work for the project and will require that the cost/resources and the time to complete the distribution also increase in order to successfully implement these activities.

The project manager needs to understand the relationships and trade-offs that exist between each of the constraints to effectively manage the project. When considering constraints, it may be helpful to think about them within the context of inflexible or adaptable/may concede.

Inflexible – Indicates that this constraint is the most critical and must be constrained.

Any change in this constraint results in a negative impact on the project. For example, if you are implementing a winterization project (providing blankets, winter clothing, etc.) for beneficiaries that needs to take place before the winter season begins, the time is an inflexible constraint.

Another example is an inflexible resource/cost if the project donors' policies do not allow changes in the budget. If you spend less than originally planned on a specific activity, it doesn't mean the balance can be shifted to other activities or transferred to other projects. Even though there will be a balance at the end of the project, no adaptation or change is allowed in the budget. Some donors require that you

report the unused funds, which will be deducted from the following project funds transfer or returned to the donor.

Adaptable/May concede – Indicates that there is some flexibility within the constraint, but it should be optimized as much as possible. If there is a change needed for the project that affects one of the constraints and that constraint is adaptable, actions can be taken to accommodate the change.

For example, if in the process of procuring seeds for an agriculture/livelihoods project that aims to improve wheat yields it is discovered that there is a wheat plague affecting the crops, and the scope is adaptable, the original seeds can be replaced by rice or corn – without changing the timeline and budget, which are inflexible.

In another project, additional time is needed at the end of the project because of delayed activities at the beginning. Some projects expect activities to start on the very first day after the formal authorization. Receiving funds, hiring the project team, and developing the detailed plan is often forgotten, or takes more time than anticipated. Since time is adaptable (according to the project charter and agreement), the project schedule can be adjusted to accommodate the initial delay.

Constraints can also **concede** to optimize other constraints adaptation or manage inflexible constraints. In the previous example that a scheduled adjustment is required (adaptable time), the activities' delay might require postponing the project closure in a few months and extra funding is necessary. The budget may concede to optimize the time change, through a request for additional funds, if approved by the donor.

As another example, if exchange rates negatively affect the number of NFI (non-food item) kits the project is able to procure and the budget is inflexible, the scope of work may be reduced to accommodate the actual amount of funding received. The constraint in the scope of work, in this case the number of NFI kits, concedes because the budget constraint is inflexible.

Figure 4 further illustrates other potential examples of how constraints can be classified.



Figure 4: Classification of Project Constraints

By clarifying the classification of each of the constraints – **inflexible or adaptable/may concede**, the project manager can enter into discussions with project stakeholders to frame and drive a discussion on setting priorities for each of the constraints. It is important to get the priorities established and agreed

upon by all stakeholders early in the project. Trying to negotiate these constraints after the project is launched is often difficult or impossible. Once people solidify their views of the constraints with scheduled tasks and named resources, the effort to make changes becomes much more difficult.

1.2.3 Program and Portfolio Management

In the development sector the terms 'project', 'program', and 'portfolio' are frequently used and often interchangeably. In the absence of a consistent and precise definition for these terms, the roles and responsibilities of the project manager can be unclear and misinterpreted. We have already discussed the definition and parameters of project management, so now let's take a look at the program and portfolio management.

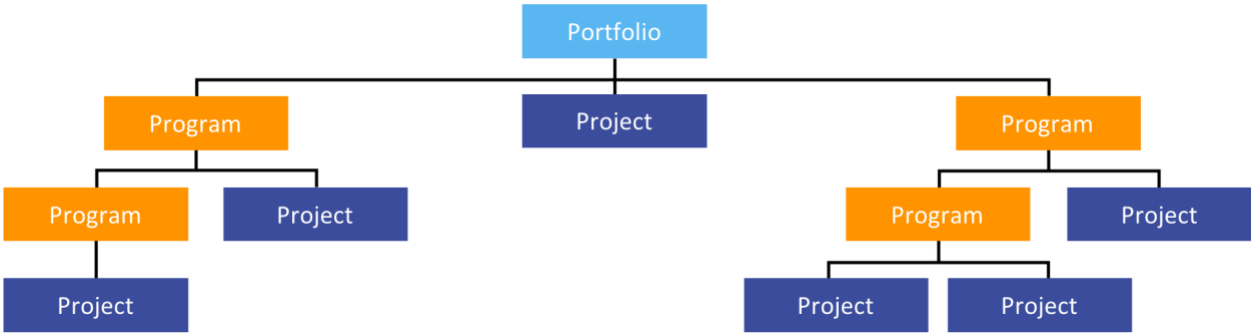


Figure 5: Projects, Programs, and Portfolio

Program Management

Programs are groups of related projects and activities (sometimes referred to as 'component parts of a program') that are managed in a coordinated way to achieve an impact that is greater than if they were managed individually. In other words, the whole (the benefit of the program) is greater than the sum of its parts (the projects, activities and tasks). Development and humanitarian organizations often organize projects into programs to deliver outcomes that address a broad range of needs and achieve exponential benefits for the communities in which they work.

Most programs are managed at a country level under the supervision of a Program Manager and the leadership of a Country Director, Head of Programs or similar role (ex: Program Owner). Some programs are devised to deliver global goals, and these are more likely to be managed at a regional or headquarters level. Not all development and humanitarian organizations have clearly defined hierarchies, opting instead for a flatter structure with shared responsibilities, in which case program management responsibilities are defined and shared as a team.

Programs, unlike projects, are generally implemented through a centralized management system in which groups of projects are coordinated to achieve a program's overall strategic objectives and benefits. This approach is particularly important in the development and humanitarian sectors because it enables NGOs to achieve economies of scale and realize incremental change that would not be possible if projects were managed separately. Program management is especially important within the development sector because projects managed via a coordinated program have the potential to realize change (or benefits) that would be impossible if they were managed separately. Some areas of potential program alignment include:

- **Geographic Area** – Projects often work side by side in the same region or throughout the country, and one of the central concerns of a program manager will be how the resources of multiple projects working in the same geographic area can be leveraged to have a greater impact than each would have in isolation. Most frequently, programs work in a single country, although it is increasingly common to find programs that are multi-country or global in scope.
- **Sector Intervention Areas** – While projects generally tend to work in a single sector within a shorter time frame, programs often encompass multiple sectors and work within a longer time frame.
- **Objectives** – By coordinating the goals and objectives of multiple projects through a coordinated program, an organization has greater potential to achieve its higher-level goals.
- **Funding** – Often a single organization can manage multiple projects with funds from the same institutional donor. In this scenario, the opportunity exists to coordinate these projects within the context of a single program, which can result in economies of scale.
- **Target populations** – Organizations often overlap between targeted populations for projects in different sector areas (health, water, education, etc.). Coordinating these projects through a program-based approach allows the organization to link them via common indicators, shared resources and processes that help the communities continuously assess whether organizations are conducting the "right" interventions.
- **Management** – While the staff of individual projects will focus on implementing the activities that contribute directly to the outputs and outcomes within their scope, at the program level, managers will focus on the challenge of coordinating projects, best leveraging resources of multiple projects, and increasing the impact of the program.

Portfolio Management

In most organizations, there will always be competition for limited resources. The portfolio management process helps to harmonize programs and projects so that they are aligned and can best meet overall strategies and goals. This involves prioritizing and balancing opportunities and risks against the supply and demand of resources in order to meet the overall objectives of an organization. Because of their complexity and strategic focus, portfolios are typically managed by a Country Director or at a regional or global level by a high-level executive team.

While not the responsibility of program managers, it is still important to be aware of issues related to portfolio management. Given competition for limited resources, program managers and their teams should be able to articulate how their programs and projects:

- Contribute to the achievement of the organization's vision;
- Support the strategy of their organization;
- Contribute value to the organization's programs and/or portfolio.

Portfolio management oversees the performance of multiple projects and programs. It is not concerned with day-to-day project tasks but focuses instead on selecting, initiating and managing an overview of all efforts in a way that addresses the strategic objectives of an organization. Portfolio management involves making high-level decisions about whether to stop or redirect a project or program so as to optimize the strategic fit of the efforts being undertaken to fulfill the organization's mission.

Portfolio	Program	Project
The Portfolio Manager is a high-level leader who is accountable for the totality of an organization's investment in the changes required to achieve its strategic aims and objectives.	The Program Manager coordinates, directs and oversees the implementation of a set of related projects and activities (usually over several years) in order to deliver outcomes related to an organization's strategic objectives.	The project manager is responsible for coordinating temporary structures that have been created for the purpose of delivering one or more outputs.
Portfolio Characteristics: • Establishes long-term vision for entire organization • Provides overview and organizational insight • Sets policies, standards, priorities and plans • Understands cross-organizational issues • Manages high-level strategic risk • Takes tough decisions • Well-rounded knowledge of context (internal and external) • Ability to oversee a mix of programs, projects and other activities	Program Characteristics: • Establishes and clarifies strategy and vision within program boundaries • Engages with stakeholders at all levels (internal and external) • Directs and oversees the implementation of project activities • Manages strategic and operational risk • Understands and resolves inter-project issues • Focuses on quality and outcomes • Ensures the delivery of measurable benefit and impact	Project Characteristics: • Manages and coordinates • Delivers outputs • Time, cost, and scope • Focuses on fit-for-purpose outputs that meet requirements and enable benefits realization • Focuses on project risks • Manages issues related to deliverables • Plans for the successful execution of deliverables and activities

Table 1: Project, Program, and Portfolio Management Summary

1.2.4 Where do projects come from?

Projects and the funding for projects can take many different forms, depending on the context, the organizational structure, and strategy of the organization. While there may be different mechanisms in which projects are developed and funded, the framework from which we approach projects remains the same.

INGO/Implementing Partner: An international NGO may run a program and have several different local, implementing partners conducting the activities and doing the work that contributes to an overall programmatic goal. Frequently these programs are called projects, but in all reality, each implementing partner component could potentially be considered a project itself.

In most cases with this kind of project, the components of the intervention have already been identified and designed, with the focus of the implementing partners on the execution of the activities.

Example: An INGO is implementing a multi-sector program in a post-conflict environment, seeking to provide the targeted communities with improved access to basic services. The INGO is working with 4 implementing partners, each working on a specific sector: protection, WASH, food distribution, and shelter. Each of these sector components can be considered a project and have specific objectives that will lead to the programmatic outcome of improving the access of basic services to the targeted communities.

Stand-Alone Project: Some organizations may have multiple funding streams that allow a certain level of flexibility when it comes to identifying and implementing projects. Stand-alone projects are usually funded by the organization through these alternative forms of (unrestricted) funding. Some examples may include:

- The NGO has a fair-trade store at a local shopping mall to sell handicraft products made by artisans who live in the community.
- The NGO has fundraising events that provide a source of income to pursue stand-alone projects.

Example: A group of artisans that provide products to the store needs financial training to better manage their cash flow, financial reserve, and profits. This project doesn't fit neatly within any specific program at this point and therefore, stands alone.

From the profits the store is able to provide, the NGO decides to run a one-year stand-alone project that will develop a financial brochure based on the artisans' specific needs and context.

The output and outcome of this stand-alone project might be helpful for other projects or programs in the future. But, while designing, planning, implementing, and closing this project, its goal was simply to attend the artisans need – with no relation to other initiatives.

Grants: In most cases, grant projects will be very focused and fall under a specific topic outlined by the donor. Grants may come from INGOs, governmental agencies, foundations, or private donors.

Example: A local CBO receives a grant to design and implement an education project for their community, providing after-school support to students who are falling behind in their class work. The CBO is responsible for identifying, designing, planning, and implementing the project intervention. Essentially, the CBO is responsible for the project from start to finish.

Projects under programs: An organization will likely have several programs running at any given time, each of which ought to have a specific program outcome. Under the umbrella of each program, several project interventions will be designed and implemented according to the program outcome.

Example: An INGO has a Gender-Based Violence (GBV) Advocacy and Awareness program with the outcome of increasing the awareness of the community on the root causes of GBV. One of the projects under this program may be to conduct an awareness session for local community leaders on the effects of GBV on the community. Another project under this program may be conducting an advocacy campaign to lawmakers with the focus of changing policies at the national level. Together, all of these project outcomes will become outputs at the program level and work toward achieving a programmatic level outcome.

1.2.5 The Principles of Project Management

Principles guide the way in which we approach projects, providing a framework for structuring our management of interventions. The Project DPro outlines 5 Principles of Project Management: Well-Governed, Participatory, Comprehensive, Integrated, and Adaptive.

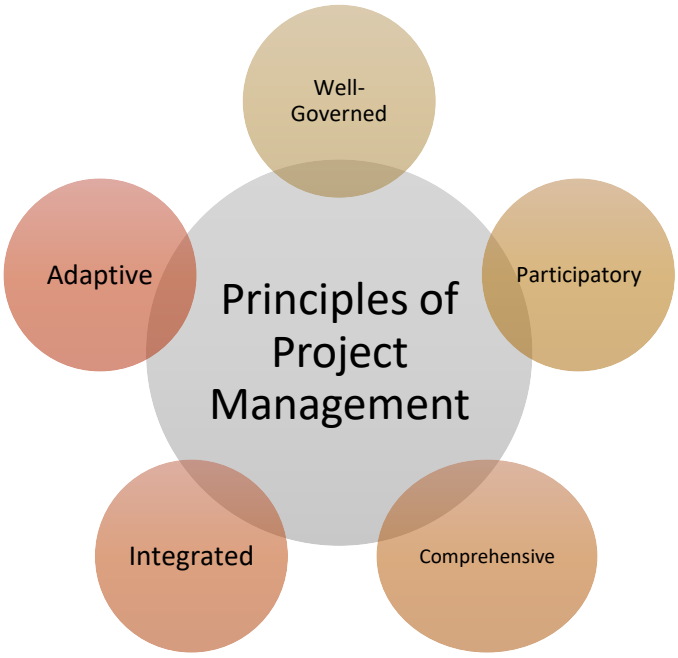


Figure 6: Principles of Project Management

The Principle of Project Management will be covered in more detail in Section 3 of the Project DPro Guide, but it is important to have a general idea of what each of these principles entails.

Well-Governed: The governance structure of a project provides a framework for management and decision-making, clearly articulating the roles, responsibilities, and tolerances (authority) of each level in the management. Governance is introduced in the Identification and Definition phase and further detailed in Project Setup. During Planning, Implementation, and Closure, the governance structure will be essential to determining changes and play an active role in Decision gates throughout the project. A

well-governed project ensures that the project manager is clear on which decisions need to be made by whom and when, while establishing a system of support and feedback to enable a more productive project environment.

Participatory: Participation of stakeholders throughout the entire life of the project is important for ensuring the project success. When stakeholders are actively involved, the ownership of the project increases. The project manager is responsible for identifying to what extent each stakeholder should be involved in each phase and how that engagement will happen. The Participatory Principle is woven throughout the entire Project DPro Phase Model, through the tools and processes outlined in each of the phases. In Identification and Definition, for example, stakeholders are identified and analyzed to determine who they are and how they will be/want to be involved in the project.

Comprehensive: A project manager must be able to approach the project in a way that takes into consideration which project components fit together to contribute to the goal. From identifying the project – ensuring that the outcome aligns with organizational/program/sector objectives – to planning for all project activities (direct and indirect) a comprehensive project puts the individual project pieces together to create a complete picture, effectively working together to reach the project outputs and outcomes.

Integrated: Phases, tools and processes in a project are not silos, they cannot efficiently function together unless they are integrated with one another. The project manager is responsible for developing a strategy in which each of the tools and processes builds upon the next, as well as understanding the environment and context in which the project operates and working within constraints to ensure all project elements are integrated.

Adaptive: Even the most well-defined and planned for projects will experience challenges and issues – this is inevitable. The way in which the project manager responds to challenges, issues, and changes determine the overall success and impact the project will have. Decision-making based on data and information should guide the project manager in adapting the project activities and components to the evolving environment.

1.2.6 Project manager Competencies

The Art and Science of Project Management

How many of us know a project manager who is not well rounded? This might be the manager who is great at the technical skills of project management but is afraid or unable to collaborate with a team or with project stakeholders. For example, this project manager might be an expert with spreadsheets, diligently organizing the work and planning future scenarios, but is ineffective in communicating the work that needs to be done to the project team. As a result, the project team is lost and stakeholders hunger for leadership and communication.

This scenario naturally raises the questions: “What is effective project management? Is it an art or a science? Does it require soft “art” skills related to human behavior and interactions, or is it a collection of hard “science” skills that focus on the technical management of inputs and outputs?”

The answer, not surprisingly, is “both.” In project management, as in much of life, the secret to success is balance.

The Art and Science of PM – A Short Story

David is a project manager for a local community-based organization, implementing an education project that is focused on providing remedial tutoring services for students who have stopped going to school so they can re-enter the school system. David is a well-seasoned veteran in the project management world, a master at designing and planning projects. However, he has been experiencing a lot of turnover recently that is resulting in a lot of delays in the project.

So, one day David asks one of his most trusted team members, Allison, what is going on. Why is there so much turnover happening in the project?

"Well, David, to be honest, you are an amazing project manager when it comes to making sure that we do all of the work on time. Reports are always impeccable and we rarely have issues with the donor. But to be honest, a lot of the team members feel that the only time you communicate with them is to ask them to deliver something or to point out a mistake. They don't think you care about anything but meeting the deadlines and targets." Allison stated.

That made David think. Achieving objectives on time, budget, and within scope are really important but what David forgot about was the "art" of project management. Providing a motivating team environment and leading team members in a constructive way is just as important as the "science" of project management.

In David's project, though all technical aspects of the project indicated that it would be delivered successfully, the turnover of team members caused a delay. New team members had to be recruited and trained over and over again.

It is all about balance and a good project manager will be able to balance the "art" and "science" of project management.

The art of project management focuses on the people elements of a project and requires skills that enable project managers to lead, empower, motivate, and communicate effectively. The 'artistic' project manager can direct the team when work challenges shift, realign priorities when the field realities change resolve conflicts when they arise, and determine which information to communicate when and to whom.

The 'science' of project management focuses on the technical, project management competencies of planning, estimating, measuring, and controlling of work. The 'science' encompasses the who-does-what-when questions and ensures that the technical project management components are being actively managed. The 'science' of project management maintains the Triple Constraint Triangle and constantly assess the activities of the project to ensure that targets will be met and outcomes achieved.

A key to a successful project is balancing the 'art' and 'science' of project management. While it may be unlikely that all project managers are strong in both the 'art' and 'science' of project management, it is essential that an inventory of strengths and weaknesses of the project manager are conducted and that the project manager actively works to balance the 'art' and 'science.'

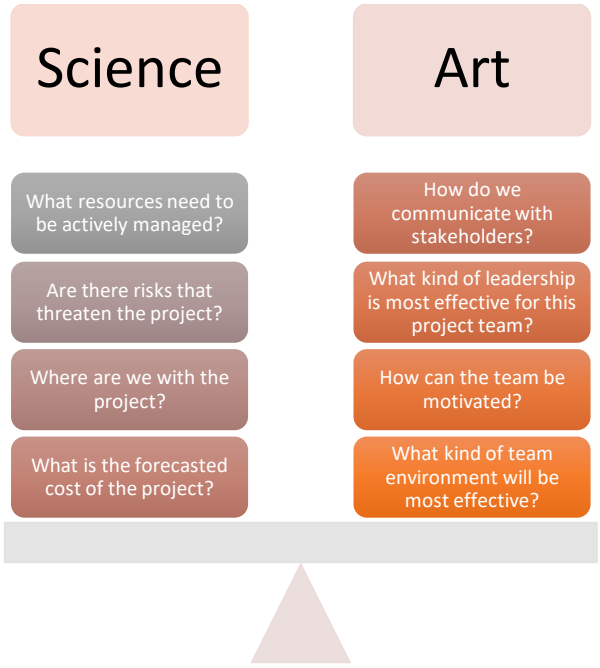


Figure 7: Balancing the Art and Science of Project Management

The Project DPro Project Management Competency Model

While the classification of project management skills into the categories of art and science is helpful, it is only the first step in identifying the characteristics of a successful project manager.

A more comprehensive project management competency model helps to identify the requisite skills of project managers and can then serve as a tool to assess skill levels, identify areas for improvement, and to map areas for career development. While multiple competency models exist for project managers, the Project DPro model organizes project management competencies into four areas:



Figure 8: Project DPro Competency Model

PM Technical – These are often referred to collectively as the 'science' behind project management. Can the project manager identify, select and employ the right tools and processes to ensure project management success?

Leadership/Interpersonal – Often referred to collectively as the 'art' of project management. For example, how does the project manager communicate, inspire, and resolve conflict?

Personal/Self-Management – The project manager's ability to self-manage. For example, can the project manager effectively prioritize, manage time and organize work?

Development Sector Specific – The ability to apply the PM technical, leadership/interpersonal and personal/self-management competencies in the context of development projects. For example, can the project manager identify, select and employ the right tools and processes that are unique and specific to the development sector?

Competency	Characteristic
PM Technical	✓ Proactively manage scope ✓ Comprehensively identify the activities required for project success ✓ Manage the overall schedule to ensure work is on time ✓ Define and collect metrics to measure project progress ✓ Identify, track, manage and resolve project issues ✓ Proactively disseminate project information to all stakeholders ✓ Identify, manage and mitigate project risk ✓ Establish logistics systems ✓ Ensure that project deliverables are of acceptable quality ✓ Identify if and when changes need to occur and the impact of those changes on the project ✓ Plan and manage the budget and the expenditure of the project
Leadership/Inter-Personal	✓ Vision the 'big picture' of a project within an organization portfolio ✓ Champion the project (promoting buy-in) ✓ Communicate vision – setting reasonable, challenging expectations ✓ Provide timely and helpful performance feedback to team members ✓ Facilitate a productive team environment ✓ Communicate proactively (verbal and written), including active listening ✓ Motivate team members to willingly follow direction and achieve goals
Personal/Self-Management	✓ Organizational skills ✓ Attention to detail ✓ Ability to multi-task ✓ Logical thinking ✓ Analytical thinking ✓ Self-discipline ✓ Time management

Development-Specific	✓ Understand development sector values and paradigms (or mode of operation) ✓ Understand the different stakeholders involved in development projects ✓ Understand and navigate complex development environments ✓ Work effectively with an array of implementing partners ✓ Cope with the unique pressures of development environments ✓ Exhibit cultural sensitivity

Table 2: Project DPro Competency Model Characteristics

- The competency level a project manager needs in each of these areas will vary in accordance to the size, complexity, and risk of the project. However, despite their differences, all projects can benefit from using this model to better ensure that: the activities are comprehensively identified, prioritized, and sequenced;
- the schedule is thorough and identifies the interrelated elements of the project plan;
- procurement processes (for both materials and contractors) are identified and implemented;
- communications norms for appropriate stakeholders are in place and executed;
- personnel systems exist for staff, volunteers, and implementing partners;
- risks are anticipated and monitored;
- a system is in place to ensure that the projects meet acceptable quality standards; and
- a change management process is in place and managed.

As the responsibilities of a project manager increase – from relatively simple projects to more complex projects – the knowledge, skills, and behaviors in each of these competency areas will need to increase as well. Furthermore, one of the most distinct skills that project managers need to develop over time is the ability identify alternatives that exist to address a challenge (budget overruns, team conflicts, ambiguous roles, shifting schedules, unanticipated risks) and respond using the appropriate competency that fits the unique needs of each situation.

While all four competency areas of project management are critical to ensuring project success, the scope of the Project DPro Guide specifically focuses on the "science" competency areas of PM Technical and Development Specific. However, to help project managers achieve their overall ranking in each of the competency areas, a self-assessment is available at www.pm4ngos.org.

1.2.7 Phases in Development and Humanitarian Projects

For successful development and humanitarian projects, it is critical that the full array of project management competencies (See Annex I for PM Competencies) is applied in a balanced way through the entire life of the project. Many organizations have developed project lifecycle diagrams which they use to identify the phases that map the process of the project from start to end. Together, these project lifecycle phases identify the logical sequence of activities that accomplish the project's goals or objectives.

Figure 9, for example, represents the lifecycle design for projects and programs for the World Wildlife Federation. In this case, the project lifecycle is represented by a series of steps within a cycle and is just one example of a project lifecycle model.

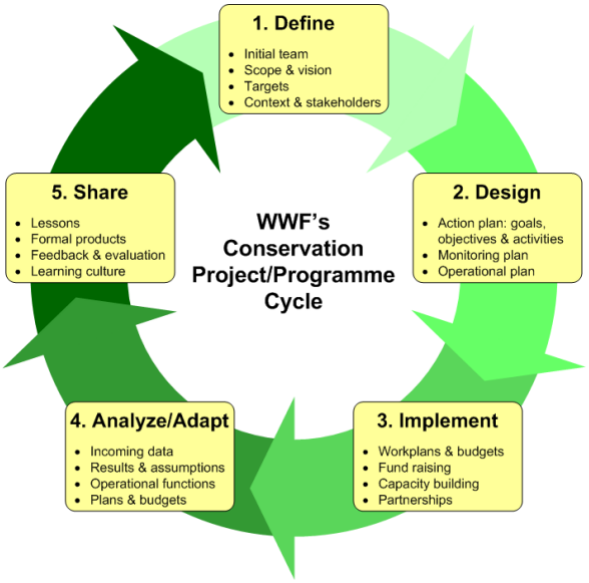


Figure 9: Example Project Management Lifecycle
Source: wwf.panda.org

Other development and humanitarian organizations have adopted project lifecycles that are represented by other designs, including circular models, linear models, or modified spiral models. The exact sequence and wording of project lifecycle diagrams can vary considerably between industries and organizations; however, their objectives are the same. By grouping activities into a project lifecycle sequence, the project manager and the core team can better:

- Define the phases that connect the beginning of a project to its end.
- Identify the processes that project teams must implement as they move through the phases of the project lifecycle.
- Illustrate how the project management lifecycle can be used to model the management of projects.
- Model how projects work within an environment of 'constraints', where changes to one constraint will result in consequential changes to the other project parameters.

1.2.8 The Project DPro Phase Model

The Project DPro uses a phase model approach, providing guidance on what ought to be covered in each phase of the project. The Project DPro Phase Model can be incorporated into already existing project lifecycles or can stand alone if a lifecycle is not available within the organization.

It is important to point out that the phases don't necessarily take place consecutively, but rather they interact with one another. You do not start one phase, stop it, and start the next phase. This allows for more flexibility and adaptability of the phase model into a variety of different projects and sectors.

The revised Project DPro Phase Model has 5 phases: Identification and Definition, Project Setup, Project Planning, Project Implementation, and Project Closure.

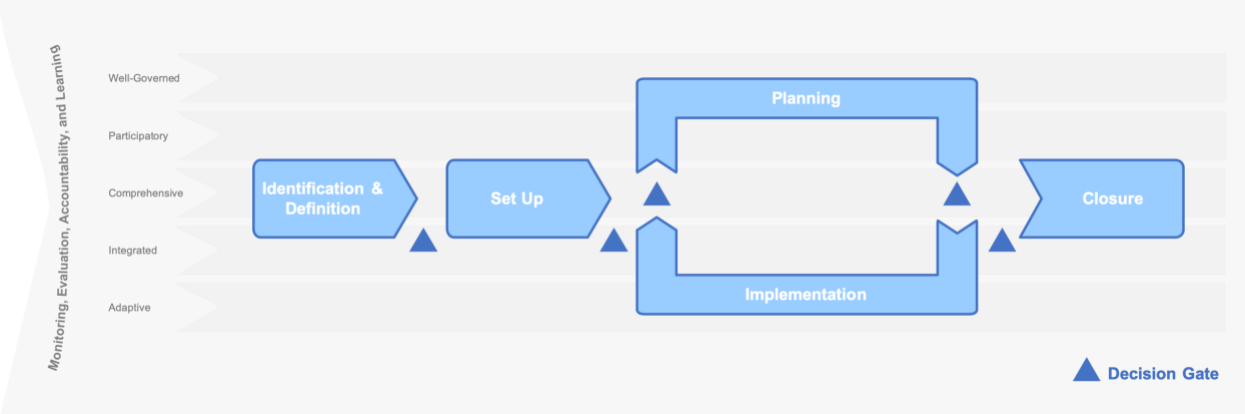


Figure 10: Project DPro Phase Model

The Project DPro Phase Model was designed with the express intent of ensuring that the model is balanced and comprehensive which is especially important within the context of the development and humanitarian sectors. Too often, organizations place strong emphasis on designing and implementing the project which can overshadow the importance of other phases in the life of the project.

Clearly, strong design and implementation of projects are necessary but is not sufficient to guarantee project success. A project must not only invest in strong, coherent project design and implementation, but must also commit to investing similar levels of resources and effort in all phases in the life of the project.

Monitoring, Evaluation, Accountability, and Learning (MEAL)

In the previous version of the Project DPro, Monitoring, Evaluation, and Control (MEC) were included as a phase. However, in this version, the MEC has been expanded to include Accountability and Learning and has been incorporated into each of the phases of the project, providing guidance and tools on MEAL activities that should be done in each of the phases. This, more integrated approach, more clearly articulates how MEAL and project management need to work together to bring about the outputs and outcomes of the project.

Project DPro Phases

Identification and Definition: It is during this phase that the project teams define needs, explore opportunities, analyze the project environment, and design alternatives for defining the project. The decisions made during the Project Identification and Definition Phase set the strategic and operational framework within which the project will subsequently operate.

Project Setup: It is during this phase that the project is officially authorized, and the overall parameters of the project are defined and communicated to the main project stakeholders. It is also during this phase that the project team establishes the high-level project governance structure

Project Planning: Starting from the documents developed in earlier phases of the project, during the planning phase the team develops a comprehensive and detailed implementation plan and supplementary plans (MEAL, Supply Chain, etc.) that provides a model for all the work of the project. These plans are revisited throughout the life of the project and updated to reflect the changing contexts of the project.

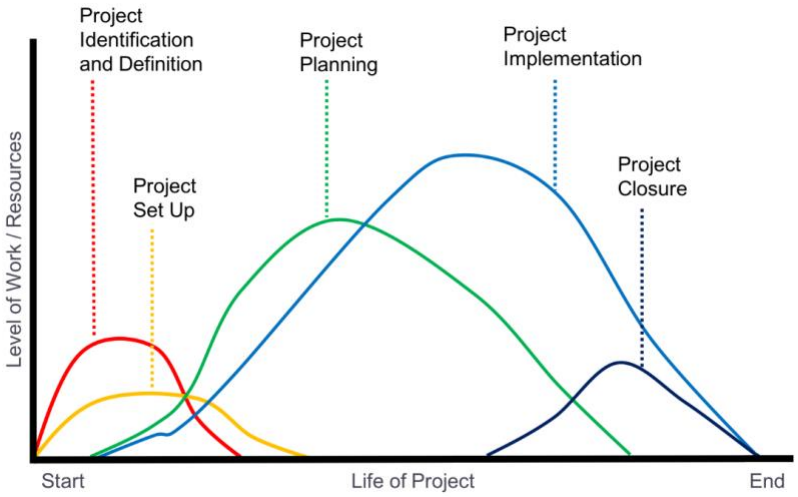


Figure 11: Project DPro Phase Interaction

Project Implementation: The day-to-day work of project implementation is to lead and manage the application of the project implementation plan: leading the team, dealing with issues, managing the project team and creatively integrating the different elements of the project plan.

Project Closure: This phase includes implementing all closure activities that need to occur at the end of a project, including (but not limited to): confirming the deliverables with beneficiaries, collecting lessons learned, and completing the administrative, financial and contractual closure activities.

In general, certain phases of the project will take place only after others are completed –for example, project closure will take place after the project is implemented. This does not mean that project closure is ignored until after the implementation phase is completed. While closure activities will take place toward the end or after the implementation of the project, considerations will be made starting from the Identification and Definition phase and incorporated into the Setup and Planning phases as well.

1.2.9 Decision gates

Decision gates are critically important to effectively managing projects. Decision gates are checkpoints in the project where you will justify that the project should move forward as is, make changes based upon information available, or stop the project altogether. Think about it this way, you are going to ask yourself: "are we still doing the right project and are we still doing it in the right way?"

Decision gates can take several different forms and the number of formal decision gates will depend on the length and complexity of the project and the environment in which the project is operating.

The decision gate process should also be linked to the project management tolerances and the governance structure of the project team. The governance of the project will help to guide and assist the project manager in making any changes and decisions through the decision gate process. If there is clarity on the authority level the project manager has to make decisions and an understanding of which stakeholders to involve and when, the Decision gate process will be more efficient and effective.

Navigating and managing a large group of stakeholders through a number of Decision gates often takes considerable time and runs the risk of communications challenges. Despite this complexity and risk, the advantages of moving through Decision gates in a participatory manner help to:

Consulting Stakeholders

As the team develops the documents associated with each decision gate (i.e., a business case document, concept paper, letter of interest, project proposal, etc.), it will need to engage stakeholders to explore the central questions related to the potential project. These questions include (but are not limited to) the following:

- Has the project scope been reviewed and accepted by the project's beneficiaries?
- Is the high-level project schedule consistent with the expectations and constraints of stakeholders?
- Have stakeholders agreed on a minimum level quality requirement?
- Has the high-level project scope, schedule and budget been reviewed with the implementing organizations who will conduct project activities?

These questions, and others like them, provide check-in points early on in the project design process that help to ensure that the official project proposal is feasible and appropriate.

- Ensure that the organization does not invest extensive amounts of time, money, personnel capacity and organizational capital in developing project proposals that lack commitment and support from key decision makers (donors, implementing partners, decision-makers internal to the agency).
- Provides a framework for project control, ensuring that mechanisms are in place and are effectively being used and examined throughout the life of the project.
- Support a robust analysis of the project concept, providing multiple perspectives and encouraging collective ownership for the project once it begins implementation. It maps out the process through which a project needs to be vetted in order to ensure that it has the support (both internal and external) that is required for the project to ultimately be approved and reduces the probability of the "perfected but rejected" scenario.

One of the "best practices" used to manage the risk of a 'perfected, but rejected' scenario, is by establishing a decision gate process that consists of a series of authorization points at various stages of the project. By using decision gates, organizations identify a series of points in the project that require a decision to either proceed with the next phase of the project, modify the scope, schedule, and/or budget of the project or end the project outright. Each successive decision gate builds on the work that was developed in the previous stage.

Decision Gates – Perfected BUT Rejected Scenario Example

Take, for example, you are in the Identification and Definition Phase and you ask yourself: "At this point we have already invested considerable amounts of time/money/effort into the identification and definition of the project without having any guarantee that our project will be approved. Isn't this a significant risk?"

There is always a risk that an organization will invest extensive resources in the Project Identification and Definition Phase and then find out the project is not officially approved.

In an ideal world, the project team would want to set up a system through which they can receive a clear indication of whether a project will (or will not) receive support BEFORE considerable resources are invested in the identification and definition of the project.

Project teams want to avoid the "perfected, but rejected" scenario, where organizations have already spent thousands (and even tens of thousands) of dollars on project identification and definition activities, but the project ultimately lacks the support of key stakeholders (inside the organization, in the community, among government staff, or from the intended donors).

Within the context of the Project DPro Project Phase Model, the decision gates are represented by the triangles located between the project phases.

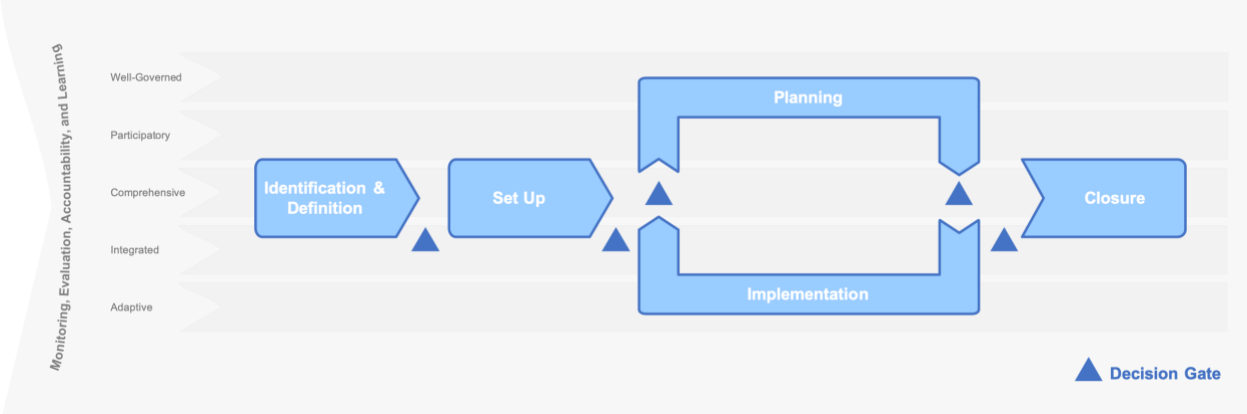


Figure 12: Decision gates in the Project DPro Phase Model

As previously mentioned, the number of decision gates in a project will vary according to the project, its complexity, and the key stakeholders. For that reason, the triangle icons (decision gates) in the Project Phase Model are intended to serve as an illustrative model of where decision gates might be placed. Some projects might have more decision gates, others might have less. What should be clear is that a system of decision gates will help ensure that project investments are not made without the buy-in of key stakeholders.

Placing decision gates at regular points in the project (for example, at the beginning of each year of the project's implementation) helps to:

- Keep the project focused on the need that the project was originally undertaken to address;
- Ensure that the context and assumptions that initially led to the approval of the project still exist;
- Provide an opportunity for the project team and key stakeholders to decide whether to: continue the project as it is presently conceived; modify the project plan; terminate a project (which is not necessarily a failure if the intervention is no longer appropriate, feasible, or necessary).

The example in Table 3 identifies three decision gates that were established for the Delta River Latrine Construction Project during the Project Identification and Definition Phase.

Decision Gates: An Adaptive and Agile Tool

As projects progress through the five phases, it is recommended that the project team revisit the justification and planning of the project through a series of formal decision gates (represented by triangles in the Project DPro project phase model).

At each Decision gate, the project team has the opportunity to decide whether the initial justification for the project is valid, whether any major changes are required, or whether project investments need to be halted altogether.

Every project and organization will have a different approach to decision gates. The most frequently used decision gates tend to be those that are found in the early phases of the project. These include the concept papers and project proposals that comprise the input documents to decide whether to move forward with potential projects. It is advisable, however, to also include decision gates in later phases of the project.

During the implementation phase, for example, it is helpful to formally check to ensure that the need the project is intended to address still exists, that the logic of the intervention is still valid, and that implementation plans are still accurate.

Decision gates in the Delta River Latrine Construction Project

The decision gates during the Project Identification and Definition Phase in this case could be the following:

Decision gate 1 Project Concept Note	As an implementing partner, you submit a Concept Note to an INGO outlining the high-level activities, budget, and timeline for a project under the INGO's program. The Concept Note will result in one of the following scenarios: 1.) Your Concept Note is approved, and you move to the next stage of a fully developed proposal. 2.) Your Concept Note is rejected. 3.) Your Concept Note is approved with changes.
Decision gate 2 Project Proposal	Once the initial Concept Note has been approved, you will likely be asked to develop a fully developed proposal. Much like the Concept Note, there are 3 possible scenarios that could take place: 1.) The proposal is approved, and you move forward with setting up and planning for the project. 2.) The proposal is rejected. 3.) The proposal is approved with changes.
Decision gate 3 Government Authorization	Most governments (local or national) in which a project operates requires authorization before proceeding. Governments generally need to approve the location, concept, and other key elements of the project before it moves forward to the next phase.

Table 3: Delta Rive Decision Gates Examples

Decision gates within each phase will differ depending on the project, organization, and context. Internal Decision gates must be closed before moving to the next phase of the project. If a Decision gate remains open while moving to the next phase, it could impact the project team's ability to effectively complete the steps that need to be taken in the next phase.

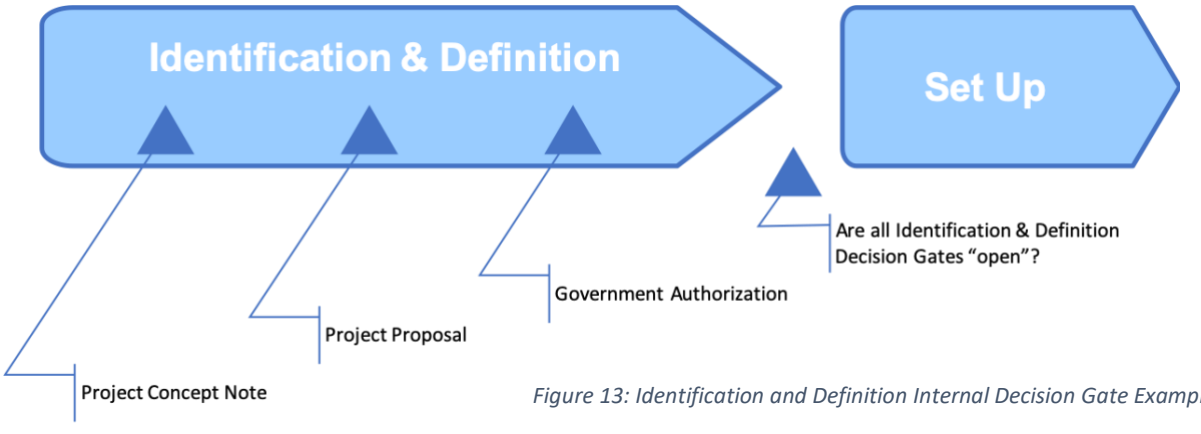


Figure 13: Identification and Definition Internal Decision Gate Examples

For example, if government authorization is not achieved and this Decision gate remains open, the project team may spend resources and effort in the Project Setup phase while not having formal

approval to actually move forward with the project. This could negatively impact the project, organization, and stakeholders if the project does not receive the government authorization.

The stakeholders who will be involved in each internal decision gate may also vary, so thought needs to be put into determining which internal Decision gates to include and which stakeholders should be consulted during these processes.

Emergency Decision Gates

There will be circumstances in which project operating environments can change quickly and decisions need to be made to determine how to move forward with the project. This is where Emergency Decision gates come into play. Emergency Decision gates are put in place when a decision needs to rapidly be made on whether to continue with a project or whether to close it down. An example of when this could happen is in a conflict environment, when the circumstances quickly evolve, putting the project (and/or team members) at risk.

This decision will not always be within the authority (tolerance) level of the project manager, in most cases it will not be. The project manager should work with the governance structure and stakeholders to determine if and when an Emergency Decision gate should be considered.

1.2.10 How the Phases are Organized

We will go through each of the Project DPro Phases in detail, highlighting the tools and processes to achieve the output for each phase. The format of each phase is:

- **Introduction**: Highlights the importance of the phase and provides a general overview of the key components to consider during this phase.
- **Key Output**: For each phase, there is a specific output that should be produced based upon the tools and processes highlighted.
- **What Does this Mean in Practice**: Summarizes the linkage from the previous phase to the current phase and incorporates any additional considerations you need to make during the phase.
- **Inputs**: Outlines all of the documents and tools that will be helpful in completing the processes for the phase.
- **Processes**: Defines and provides examples of all of the processes and tools to achieve the phase output.

Additionally, we have provided stories and mini case studies that showcase concrete examples of what the tools and processes look like in practice. The Project DPro Guide pulls from a variety of projects in the development and humanitarian sectors to give you a wide array of perspectives.

SECTION 2. PROJECT DPRO PHASES

2.1 Project Identification and Definition

What We Cover in this Chapter:

- ✓ Identifying and defining the needs
- ✓ Types of Data and Data Collection
- ✓ Bradshaw's 4 Categories of Social Needs
- ✓ Stakeholder Identification and Analysis using the Venn Diagram
- ✓ Problem and Objectives Trees
- ✓ Current State and Future State Analysis
- ✓ The Logical Frame

"All things are created twice; first mentally; then physically. The key to creativity is to begin with the end in mind, with a vision and a blueprint of the desired result."

– Stephen Covey

2.1.1 Introduction

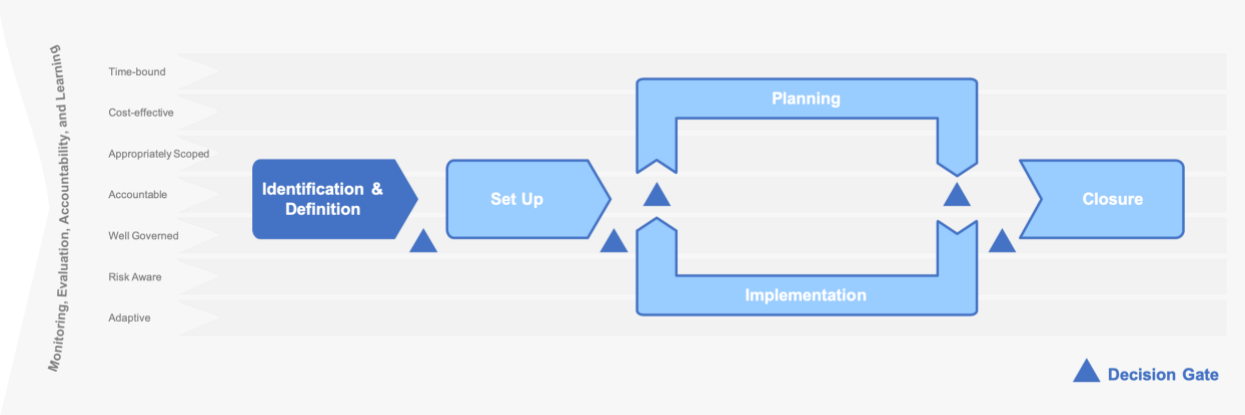


Figure 14: Project DPro Phase Model – Identification and Definition

All projects begin as an idea, a need, or opportunity that is assessed, analyzed, and ultimately developed into a project which is managed through a project life cycle. It is during this process that we begin answering the critical question 'Are we doing the right project?' Get it wrong here, and the project will be wrong for a long time – even if all of the work of the project is planned and implemented well. Get it right, and you may be halfway there.

In many sectors that rely on a culture of project management, the project begins with the official approval of the project. This is usually not the case in the development and humanitarian sectors. There

are a multitude of scenarios that could exist and likely, the project life will begin with a Project Identification and Definition Phase.

During the Project Identification and Definition phase, time, resources, and effort are invested to define needs, explore opportunities, analyze the project environment, cultivate relationships, build trust, develop partnerships, and define the high-level framework for the intervention. The decisions made during the Project Identification and Definition phase connect to existing strategies (organizational, programmatic, sectoral, national, etc.) and determine the overall framework within which the project will subsequently evolve.

Project vs. Intervention

These terms are used interchangeably in the Guide. A project is an intervention, activities that are conducted to "intervene" in a situation or context.

One of the reasons the Project Identification and Definition phase is of such great importance is because it provides the most cost-effective opportunity to answer fundamental questions about the project parameters. As a project team, you will collectively begin to build the foundation of your project through various processes with the final outputs being the project logical frame and a high-level project charter.

As illustrated in Figure 15, the easiest time to make changes to a project is at the beginning. If a project team wants to change the objectives, the schedule, or the budget, it is easier to do this BEFORE the project is underway (spending money, using up the schedule and investing resources to complete its work).

As the project moves forward, there will be other opportunities to revisit questions of scope/quality, budget/resources and time/calendar. However, once project implementation begins (staff are hired, activities begin, budgets are allocated, and deliverables start to become tangible) the cost of changing these project parameters increases and these changes become much harder to manage. Therefore, it is important that the project manager use data collected to inform these decisions during the Project Identification and Definition phase and that the general approach to this phase is one that is open to creative exploration, brainstorming, visioning and debating of strategy.

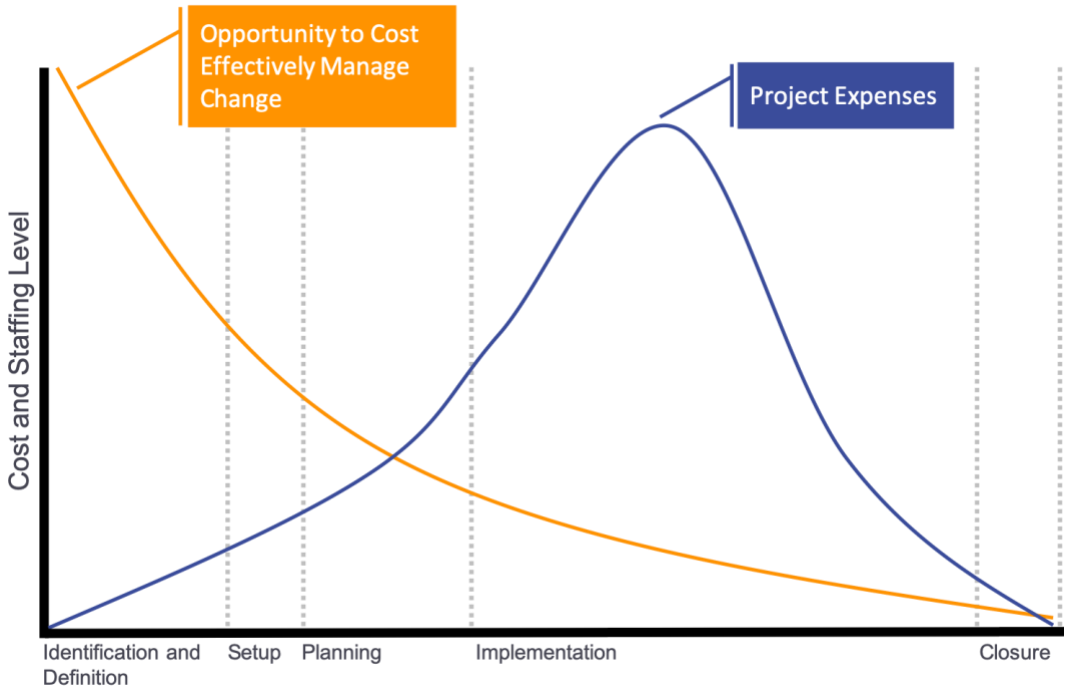


Figure 15: Opportunity to Cost Effectively Manage Change

2.1.2 Key Outputs

Stakeholder Analysis

Stakeholder management can make or break a project. However, it is really difficult to manage and engage stakeholders if you haven't taken the time to do a comprehensive assessment of who they are, their power and influence, and explored ways to engage them. During the Identification and Definition phase, this process will begin by analyzing the stakeholders and determining their power and influence. The analysis will be the launching point for a management and engagement strategy that is developed in later phases of the project.

Project Logical Frame

The Project Logical Frame (log frame) is a key process and tool that helps to outline how the activities will lead to the outputs and outcome of the project. It also provides the opportunity for outlining any assumptions related to the objective statements and includes the project indicators and means of verification that will be used to verify the objective statements throughout the project.

Project Proposal

It is during this phase that a project proposal will likely be submitted to obtain funding. For the proposal to be completed, a significant amount of information will need to be developed and obtained to create as comprehensive and accurate of a proposal as possible. It is critical to begin conducting high-level analysis of the project scope, budget, timeline, risks, sustainability, and project closure considerations.

You will also need to think about the requirements of the team and what will be needed as far as resources, both human and material, to effectively and successfully deliver the project.

High-Level Project Charter

You will begin to build out your project during this phase doing high-level analyses on risk, stakeholders, human resources, the supply chain, and sustainability. The output of these processes should be a high-level Project Charter that will be further developed during the Project Setup phase and a project proposal that will be submitted to obtain funding.

MEAL in Identification and Definition
(Monitoring, Evaluation, Accountability, and Learning)

Engagement of the MEAL team (or focal point) in this phase is critically important. The project manager will be working in close collaboration with the MEAL team throughout the project, but specifically during this phase there will be a lot of analyses conducted that will require the assistance and input of the MEAL team. This is particularly important as needs assessments and validation are conducted and a proposal developed. The MEAL team will also be involved in helping to develop the logical frame – validating indicators, ensuring that the logic is sound, helping to test assumptions, and ensuring that the means of verification are practical.

2.1.3 Who is Involved in this Phase

The Project Identification and Definition phase provides an opportunity, early in the project, to establish a participatory approach with stakeholders. While participatory approaches to project identification and definition can require more time and resources, using this approach will:

- Give stakeholders the opportunity to take control of their own development process;
- Strengthen the project design using information and feedback from multiple perspectives;
- Increase project ownership among stakeholders.

You will want to be sure to include as many project team members and stakeholders as possible but should also bear in mind that at this point, the project manager and much of the team may not have been hired. It is beneficial to ensure that the program manager, MEAL team, and other relevant internal stakeholders are part of the process and can transfer the knowledge and information to the project manager, effectively, once she or he is hired. The program manager may also be key if the project falls under one of the programs within the organization ensuring that outcomes align with the overall program strategy and providing guidance to the project manager and team on the analyses and high-level assessments that take place during this phase.

Because you will be doing high-level analyses (estimations) during this phase it is also crucial to involve the support and operational teams within your organization. Supply chain, HR, and finance will need to be consulted, especially during the proposal writing process. These personnel can be incredibly helpful in ensuring more accurate estimations when it comes to time, budget, and scope.

2.1.4 What Does this Mean in Practice

Resource Mobilization and Participation of Stakeholders

The reality of this phase sometimes means that there is a very limited time to identify the project and define the design and parameters of the scope of work. This is why it is so important to take a structured approach to identifying and defining the project and mobilizing the resources needed to effectively do so.

Engaging stakeholders in this phase is crucial to the success of the project. The identification and definition of the project can be facilitated through a participatory process that promotes the buy-in for the intervention early on and helps to outline priorities.

Another benefit of engaging stakeholders during this phase is to establish a precedent for the way in which you will collaborate and coordinate with stakeholders throughout the life of the project. The engagement should be intentional and strategic, incorporating participation and feedback mechanisms when and where appropriate. While more time consuming, the benefits of using a participatory stakeholder engagement policy far outweigh the challenges, particularly as you get to the planning and implementation phases of the project.

Decision Gates

Decision gates are essential in any phase of the project but are particularly relevant in the Identification and Definition phase. The foundation of the project is set at this phase, so getting it wrong during this phase will have a domino effect on the success and impact of the project as it moves forward.

Establishing formal decision gates, and involving stakeholders in the process, helps to ensure that you are doing the right project, in the right way. Some examples of decision gates during the Identification and Definition phase can include:

- **Needs Assessment:** Validates that the need exists and is a priority for the community, stakeholders, and beneficiaries. Informs the parameters of the project through data and feedback from stakeholders.
- **Concept Note:** Presents a high-level project concept in which stakeholders (the organization, program team, and/or donor) determine if the project meets the criteria for moving forward to the project proposal.
- **Project Proposal:** Outlines the high-level elements of the project including: scope of work, budget, timeframe, risks, stakeholders, intervention logic, and resource requirements. Intended to obtain funding.

Keep in mind that additional decision gates can be included in this phase and will be dependent on the type and complexity of the project as well as the timeframe between the initial project idea (or request for proposal) and submission of the project proposal.

2.1.5 Inputs

To successfully move through the Identification and Definition phase, you will need a variety of documents and information. Some of those may include:

- Project concept/idea
- Terms of Reference from a request for proposal
- Lessons learned from previous, similar projects
- Program Theory of Change

The inputs available will depend on the kind of project you are identifying and defining. For example, if you are responding to a request for proposal from an international NGO or donor as an implementing partner, you will likely have a Terms of Reference (ToR) to guide you. The project will likely have been identified at a high-level, requiring specific data from your side and further detailing of the parameters of your part of the intervention.

On the contrary, if you are the recipient of a grant project, you will need to identify and design the project from start to finish, including each and every project component. Likely, you will have already come up with a general idea at this point that requires further exploration and specification of details of the project.

The processes will remain the same for all projects during this phase, however, the type of project you are implementing will determine the level of detail and information you will need to establish for your project in this phase.

Concept Note

A Concept Note is a high-level document outlining the idea of a project and can be used internally or externally. At this stage you may have already submitted a Concept Note to internal stakeholders in your organization or to a donor agency or INGO in response to an RFP. The Concept Note is a great tool to use to begin framing and defining your project during this phase.

2.1.6 Process

Definition of Needs

The process of identifying and defining a project should begin with the project team collecting data and information that identifies community needs in the potential intervention area. The data you collect should not be limited only to examining issues related to community needs. There are a lot of other factors that should be considered when you explore the needs of the community that will contribute to formulating the framework for your project. Some of these factors may be:

- Current services provided in the area (whether by the community itself or other organizations).
- Stakeholders who may be involved in the project.
- Community strengths and assets.
- National or sector-level goals, objectives, and strategies

One of the challenges when collecting data is that the process can be highly subjective. People (as individuals and as members of social and interest groups) can have radically different ideas about what should be defined as a 'need' and what should not. As a result, the needs definition process in a single location can result in significantly different results depending on who is consulted and what approach is employed.

MEAL and Needs Identification

The MEAL team or focal point will work in close coordination with the project manager and team during this phase. Any data collection should include collaboration with your MEAL team or representatives.

Collecting Data

The data that you collect during this phase will not be limited to the needs and priorities of the targeted community or beneficiaries. There will be other information that you should obtain at this point in the project so that you have a more comprehensive understanding of the context. Some of that data might include:

- Legal and regulatory environment
- Social and cultural conditions and norms
- Infrastructure available and required
- Community strengths, opportunities, and vision
- Biological/physical environment
- Organizational networks
- Successes and capacity

There are a multitude of ways in which you can gather this data, keeping in mind that at this point you probably don't have a whole lot of resources to work with. For example, you may not have a dedicated budget for implementing a fully fledged data collection effort or you may not have a lot of human resources to dedicate to the data collection process. You have to keep these constraints in mind when you determine from which source and which method you will use to collect the data.

Before the data collection process can begin, however, a plan should be developed that states:

- The purpose of the data collection
- The resources available for conducting the data collection
- The human resources required
- The timeframe available for conducting the data collection/needs assessment

Let's take, for example, the Delta River Latrine Building Project. At this point, the project is just an idea that will require more information and data to validate that the need exists and provide information to the project team that will help guide them in how they proceed with the development of the project.

Table 4 provides a simple, yet structured way of determining what information and data needs to be collected for the needs assessment. Time and resources are limited at this point in the project, so the data collection process should be as focused as possible and be cost and resource effective as well.

What do we need to know?	Who/where can we get that information from?	What kind of human resources will be required?	What kind of budget will be required?	What kind of timeframe will be required?
What are the local associations, local government, other actors?	Meeting with community association / cooperative.	Experienced field agent.	Transport, lunch, office materials.	02 days of filed visiting.
How is the household disposal for waste?	Community families, associations, cooperatives.	Field agents to visit families.	Transport, lunch, office materials.	One week of field visiting.
How is the commercial / industrial disposal for waste?	Walking at the community, talking with community members.	Experienced field agent.	Transport, lunch, office materials.	02 days of field visiting.

Table 4: Delta River Latrine Building Project Data Collection Planning

Think of the data collection process as a mini project. In all reality, there is a specific outcome (understanding of the needs), a specific scope of work, budget, and timeline that all need to be managed.

Failure to properly plan for the data collection could result in an ineffective process in that data could be collected that is not relevant to the project idea or the team could miss including key information that is critical in determining the needs for the intervention.

Program Data, Lessons Learned, and Evaluations

If the project is part of a program, there may already be data and information available that the project team can use in the identification or validation of needs. This may reduce the amount of data that needs to be collected, as long as the data is timely and relevant.

Another great tool to use during the data collection in the Identification and Definition phase is the lessons learned and evaluations from previous projects – as long as they are timely as well. These evaluations and lessons learned should be incorporated into future projects and usually contain some data and information that can be used in the new project.

Types of Data

Secondary Data: Information available through published and unpublished sources, including literature reviews, surveys, evaluations, assessments, reports from NGOs, UN agencies, international organizations and government offices. Secondary data can be very cost-effective and should be the first sources accessed for assessment data. Unfortunately, access to secondary documents is often limited and care is needed when interpreting secondary data. Sometimes you will need to use primary data collection to verify the reliability and relevance of secondary data to the specific context, or to obtain deeper, more specific information. Keep in mind that secondary data can be quantitative or qualitative.

Strengths	Weaknesses
• Relatively cost-effective and can be done using the internet and/or records search. • Requires fewer human resources to be dedicated to the process. • Takes less time to conduct in comparison with primary and secondary data collection.	• Can be challenging to find data that is current. • Not all sources are created equal. Using reliable and trustworthy resources may be challenging for individuals who are not well versed in traditional research methods.

Table 5: Secondary Data strengths and weaknesses

Primary Quantitative Data: In situations where secondary sources do not provide sufficient information, or if the information is simply not available, organizations can collect data via quantitative assessment approaches (surveys, questionnaires, tests, standardized observation instruments) that focus on information that can be counted and subjected to statistical analysis.

Strengths	Weaknesses
• Quantitative data is scalable in that you can get a high number of responses and generalize the results. • If the questions and answers are written well, there tends to be less personal bias in the results. • Standard approaches can be used and you can compare the results to other data.	• Quantitative data can miss the depth of the situation • Contextualization is also difficult when there are standard questions and answers for each respondent.

Table 6: Primary Quantitative Data strengths and weaknesses

Primary Qualitative Data: In contrast to quantitative data approaches, qualitative approaches seek to capture participants' experiences using words, pictures and objects (and even non-verbal cues provided by respondents). Qualitative data is most often collected as an open-ended narrative, unlike the typical question and answer format of surveys, questionnaires or tests.

Strengths	Weaknesses
• Provides a wide range of information based upon the experience of the respondent. • Provides more in-depth information and feedback than quantitative data. • Helps the project team better understand the context through the experiences of respondents.	• Cannot be scaled up and generalized. • Requires significant time and resources to implement. • Requires that the data collection team has the knowledge and capacity to implement qualitative data collection methods.

Table 7: Primary Qualitative Data strengths and weaknesses

The strengths and weaknesses of each method need to be weighed against the time and resources you have available at this point in the project. You should be careful to select the most appropriate (and cost-effective) tools and approaches to collect information. There are many opinions on which data collection method is the best – quantitative or qualitative, primary or secondary. Each method has a purpose and a strength. For example, primary data is often perceived as preferable to secondary data. However, in reality, a project team may not have the capacity or resources available to conduct a full-scale quantitative study.

Mixed Methods Data Collection

This method consists of a combination of primary quantitative, primary qualitative, and sometimes even secondary data sources. A mixed method approach provides a robust foundation for examining data from a variety of perspectives.

Secondary Data	Primary Quantitative Data	Primary Qualitative Data
✓ Literature review ✓ Records review ✓ Existing statistics ✓ Indices ✓ Government documents ✓ Other NGOs' Documents	✓ Knowledge, practice and coverage surveys ✓ Household surveys ✓ Standardized tests and surveys ✓ Standardized observation instruments ✓ Anthropometric measurements	✓ Brainstorming ✓ Affinity diagrams ✓ Focus groups ✓ Historical narratives ✓ Timelines ✓ Locality mapping ✓ Semi-structured interviews ✓ Key informant interviews ✓ Ranking exercises

Table 8: Types of Data

While primary data collection can be specifically targeted to the precise needs of a proposed project, collecting primary data can also take a lot of time and money and involve many people. For this reason, many organizations recommend that the first round of data collection rely on secondary data, and that subsequent rounds use primary data collection approaches to fill in the gaps which are not covered by secondary data.

Furthermore, while perceptions often suggest that qualitative data has less rigor than quantitative data, quantitative approaches often run the risk of raising expectations among local communities and partners and can be quite costly. Qualitative data assessments, in turn, can be rigorous if planned and implemented with expertise, and can uncover revealing insights into the reasons behind the trends that are identified through secondary and quantitative approaches.

A combination of secondary and primary methods (including both qualitative and quantitative tools) in the same data collection process can provide a more comprehensive, integrated picture for the project to team to make decisions. And, in the end, it is all about making decisions.

Before starting data collection, you need to ask yourselves and your team 'How will this data be used?' If there is no acceptable answer to the question, do not proceed. Time and resources are too valuable at this stage to be wasted on collecting data for the sake of collecting data. Many assessment exercises have collected extensive data which have produced large documents that often sit on the shelf "collecting dust." These documents are a poor use of resources, can be an intrusion on the lives of

stakeholders, and create false expectations that could damage important partner and/or beneficiary relationships.

Whenever you begin the data collection process, keep the following questions in mind as you determine what data you need to collect and by which methods:

- ✓ What information do I need to obtain?
- ✓ From which sources can I get this information? Are there reliable secondary sources I can use?
- ✓ How will this information help in my decision-making process about the project?
- ✓ Does the data collection team have the technical and human resource capacity to implement this data collection effectively?
- ✓ Can the information I obtain be used for other projects or programs?
- ✓ How, when, and by whom will the data be analyzed?
- ✓ How will we manage and file the information and data we obtain from the collection process?

Triangulating Data

An approach to limit the subjectivity of problem definition and to work through differing perspectives of "real" needs is through using data triangulation. Triangulation is a powerful technique that facilitates data validation through cross verification from more than two sources. For example, if a study uses only one data collection method (perspective), the temptation is to believe that the findings are strong. If an investigator uses two methods (perspectives), the results may well clash. However, by using three methods/perspectives to answer a question, the hope is that the results of at least two of the three will reinforce each other. On the other hand, if three conflicting answers are produced, the investigator knows that the question needs to be reframed, methods reconsidered, or both.

At its core, triangulating data increases the confidence and validity of the study results. By combining multiple perspectives and methods, researchers can hope to overcome the weakness or biases and the problems that come from single method or a single observer perspective – thereby increasing the credibility and validity of results.

One way to use triangulation in the process of needs identification is to use an approach introduced by American sociologist, Jonathan Bradshaw, who believed that needs assessments should explore four types of need in a community and that the presence of all types of needs would indicate a "real" need.

Bradshaw's 4 Categories of Social Needs include: Felt, Expressed, Normative, and Comparative needs.

- **Felt Needs** – Felt needs focus on the thoughts and dreams of the community itself, what they think should be a priority. A felt need is likely to be subjective and could be better described as a 'want'. Felt need is necessarily affected by the knowledge and expectations of the individual, which may be unrealistic and/or unaffordable. For example, mothers might express displeasure with the mess and sickly conditions that result from lack of hygienic sanitation – but might be unaware of alternatives that exist to change the current state.
- **Expressed Needs** – This kind of need is usually done through observation. What is the community expressing through their actions? For example, if there are long waiting lists for a service, then there is an indication that the community prioritizes that need. At times, the expressed needs are consistent with what the community has mentioned through their felt need. However, at times, these needs might not be concretely identified publicly (as a felt need) as a result of political/cultural pressures or because nobody has ever asked. For example, families might not have

expressed their displeasure with the lack of hygienic sanitation verbally but are now beginning to identify locations where they dispose of their household refuse (garbage pits).

- **Normative Needs** – This kind of need compares the current situation to a set of professional or expert standards. Often, these needs are identified by a professional or expert – physicians, engineers, public health professionals, etc. For example, a sanitation expert might indicate that rates of fecal matter in household water are above the standard established by the ministry of health.
- **Comparative Needs** – These needs compare the current situation with the situation of others. One of the most common uses of this approach has been the comparison of people's access to resources. This approach recognizes that need is a relative concept and so any debate about need must take place in the context of a comparison between people. For example, members of fishing cooperative may observe that the fish stocks are higher in a nearby town with sanitation facilities.

Validating Needs

If your project is under the umbrella of a program or through a request for proposal, it may be that the project concept has already been determined. At this point, doing a full-blown needs assessment will not be required, however, it will be beneficial for you to further define and validate the needs through a simple need validation process. You may want to gather data related to the targeted beneficiaries and the context in which you will be implementing to ensure that the project is viable and the needs that had been previously identified are still valid.



Figure 16: Bradshaw's categories of social needs

As organizations explore a community's needs, the challenge will be to ensure that the needs identification process is accurate and honest. Often individuals and groups already have an idea, based upon their observations and experiences, about what type of project or service is preferred by a particular development organization. Development organizations need to avoid sharing priorities to the community prior to identifying their needs, because they might provide answers that ensure they are selected for participation and benefit. For example, if a development organization is known to primarily support water projects, then project participants are more likely to express their problems and solutions in ways that they anticipate will fit the potential interventions preferred by that development organization – a water project.

Needs Analysis

The purpose of data collection is to broadly explore and gather information on a wide variety of issues while the purpose of needs analysis is to organize and examine the data so that useful information can be extracted from it. When identifying and defining the needs for the project, you will want to organize your needs analysis into two categories: current and future state analysis.

Current State Analysis: Where are we now? What is the situation on the ground right now? What are the conditions within the community? What are the problems they are facing and the priorities for interventions? Who are the stakeholders associated with the problem? What kind of capacity do we, as the project team and partners, have to successfully deploy this kind of intervention?

Future State Analysis: Where do we envision we will be at the end of the project? What changes to we expect by the end of the project? What are some of the risks that could interfere with our ability to achieve that change? What kind of sustainability does the intervention have? Can the change be maintained once the project ends?

Current State Analysis

The primary components of the current state analysis are to explore the stakeholders, their power and influence in the project and to identify or detail the problem that will be addressed by the project. At this point, you will be brainstorming, trying to explore the various root causes and direct effects of the problem through the Problem Tree tool and using the Venn Diagram and Stakeholder Matrix to assess and detail the stakeholders involved in the project.

Stakeholder Analysis

Stakeholders can make or break our interventions, which is why so much emphasis is put on stakeholder analysis and management in the Project DPro. Throughout this Guide you will see reference to utilizing participatory approaches and involving stakeholders if possible and when necessary. To be able to do this, a comprehensive stakeholder analysis must be conducted and revisited throughout the entire life of the project.

Experience shows that when stakeholders are overlooked or misunderstood in the project, or their interests are poorly engaged or excluded during a project, it can often result in unexpected and undesirable outcomes. Projects that take the time to identify and understand stakeholders, benefit from:

- ✓ A clearer understanding of the individuals, groups and institutions that will be affected by and should benefit from project activities;
- ✓ A better indication of the capacities of these stakeholders;
- ✓ A more informed understanding of who could influence and contribute to the planning and implementation of the project;

To succeed, the project team needs to develop the discipline to manage these stakeholder relationships. Team members need to understand the reality and the complexity of interests and relations; evaluate and predict project impacts (both positive and negative) on all stakeholder groups; and design and implement engagement plans that encourage project participation and strong communication.

Components of a strong stakeholder management system include:

1. Stakeholder Identification (Identification and Definition)
2. Stakeholder Analysis (Identification and Definition)
3. Stakeholder Engagement (Project Setup)
4. Stakeholder Communications (Project Planning)
5. Revision and Analysis (Continuously)

Step 1: Stakeholder Identification

During the Identification and Definition phase, you will want to begin by first identifying and analyzing the stakeholders related to the project. You will continue to develop and detail engagement and communications as you move through the other phases of your project and to help ensure that you start thinking about the vast array of stakeholders related to your project, the Project DPro has divided stakeholders into six categories.

Stakeholder Category	Description and Examples
Users	The people who will directly benefit from the products and/or services of the project. For example, in the Delta River Latrine Building project, users will include community members who benefit from the latrines and an improvement in the quality of river water as a result.
Governance	The people or groups of people who have an interest in how things are managed on the project. For example, this category might include the following subgroups: • Project boards, steering groups, or sponsors who manage the governance framework of the project; • Auditors and regulators who establish the compliance requirements and regulatory context of the project; • Funders (individuals or organizations) or INGOs who provide financing of the project. These funders may be external (as when a donor organization provides financing) or internal (as when the project is financed with internal funds).
Providers	The individuals who actively participate in the work of the project. Managers, team members, implementing organizations, contractors and suppliers fall into this category.
Influencers	The people who have the ability to change the direction (positively or negatively) of the project. An example might be local media, government officials, business interests or community leaders.

Dependents	Those who want something from the project other than the planned final product or service. Typically, dependents are other projects or functional units of the organization that need one of the project deliverables.
Sustainers	Groups responsible for supporting the product or service after the project is completed. If we look at our latrine building project as an example, the local Delta River municipality may be expected to assume medium and long-term ownership of maintaining the latrines once the project has been completed.

Table 9: Stakeholder Categories

Some considerations to keep in mind when classifying stakeholders into categories include:

- **Stakeholders may Overlap Categories:** There are many instances where an individual or a group would fall into more than one category. For example, communities could be both users (during the project) and sustainers (as the project closes).
- **Break Categories into Sub-Categories:** The categories can be broken down into subcategories if helpful. For the governance stakeholder category, for example is already broken into three subcategories.
- **Stakeholder Categories will Evolve over Time:** New stakeholders can enter the intervention area while others lose their influence or interest. Stakeholder identification is therefore an ongoing process should be revisited at intervals throughout the life of the project.

Brainstorming a high-level list of stakeholders during this phase is very useful in developing an understanding of the context and for setting expectations of stakeholders early on. If you use a participatory approach to your project, this will also ensure that you are engaging the right stakeholders at the right time in each phase of the project. For now, brainstorm the potential stakeholders by using the 6 categories outlined above.

Step 2: Stakeholder Analysis

Some guiding questions that will help in your analysis are: Will they advocate for your project and provide support? Will they potentially present a challenge in moving your project forward? These relationships will be further developed in later stages, but it is important that you begin to think about them in the Identification and Definition phase. The stakeholder analysis process involves:

- **Exploring Stakeholder Interests**: What might they gain or lose through the project? What are the stakeholders' expectations (both positive and/or negative)? What resources can they commit? What are potential roles for stakeholders? What capacities do they hold? Are they supporters or blockers?
- **Mapping Stakeholder Influence.** Influence refers to the power that stakeholders have over a project such as their decision-making authority or their ability to influence project activities or stakeholders in a positive or negative way. What is the extent of co-operation or conflict in relationships between stakeholders? Who has the power to make change happen for immediate problems, underlying issues and root causes?

Venn Diagrams are created to analyze and illustrate the nature of relationships between key stakeholder groups. A Venn Diagram is developed from the perspective of a single project stakeholder (or a group of project stakeholders). Each circle in the diagram identifies a stakeholder involved in the

project. The size of the circle used can help indicate the relative power/influence of each stakeholder, while the spatial separation is used to indicate the relative strength or weakness of the working relationship / interaction between different groups/organizations. Venn diagrams are commonly used as a participatory planning tool with target groups to help them profile their concept of such relationships.

The Figure 17 provides an example of the use of a Venn diagram to identify the power and influence of multiple stakeholders involved in farming and household in a community that borders a river. Note that the Venn Diagram is portrayed through the perspective of **one of the stakeholder** groups, in this case, the most vulnerable families. The size and location of the industry circle indicate it is very influential but remote. Using the same logic, the Environmental Protection Agency is remote and clearly aligned to interests of the industry. Vulnerable families represent the interests of the community at large and have a close relationship with farmers and cooperatives.

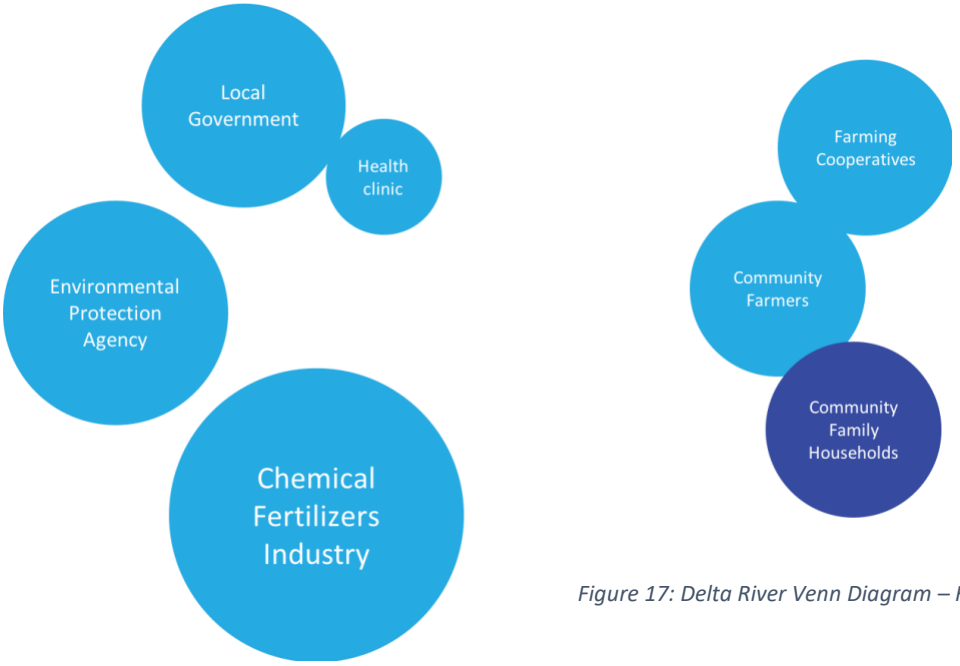


Figure 17: Delta River Venn Diagram – From the families' perspective

The **Stakeholder Analysis Matrix** uses the **outcomes** from the **Venn Diagram** (or other stakeholder influence mapping tools) to further **identify**, **elaborate** and **communicate** the interests, capacity and potential actions of project stakeholders. Unlike the Venn Diagram, the matrix allows a further narrative that provides additional data concerning stakeholders, their interests, their influence and potential actions to address the stakeholder interests. The Stakeholder Analysis Matrix is a living document that should be updated at specific points throughout the project. Decision gates are a great opportunity to get the project team together to reassess the stakeholders and ensure that they are being communicated and engaged with at an appropriate level.

Stakeholder Description	Stakeholder Category	Interest in the Project	Power and Influence	Relationship
Delta River Community Families 450 households discharge waste and waste water into the river also used as source of drinking water and fishing	Users	To reduce the incidence of water-borne disease and to improve access to WASH facilities, including latrines.	Capable of reducing the fecal disposal at the river, but not aware of its impact.	Main beneficiaries of the latrine project
Farmers and Cooperative 200 low-income earners, small-scale family businesses, organized into informal cooperatives.	Sustainers	Maintain and improve the means of livelihood. Pollution is affecting volume and quality of production. Family health is suffering, particularly children and mothers.	Potential providers. Through cooperative influence can demand changes in the industry and municipality.	Cooperatives and farming labor force composed by family members
Delta River Municipality Environmental Protection Agency and Local Government	Influencers	Interested to improve the conditions of the community and to become closer to families (relationship).	Potential Sustainer. Have the means to audit industries.	No open communication with community members
Chemical Fertilizers Industry 01 large-scale industry that produces fertilizers among other chemical products.	Influencers	Limited current motivation to change.	Have financial and technical resources to employ new cleaner technologies.	Well connected with ruling party (government).
Health Clinic 01 public health clinic that provides health assistance and services to the community.	Users	Reduction of water-borne illnesses will also reduce the demand for health services, which is overloaded.	Capable of advocating on the community behalf	Close relation with both the community and the local government

Table 10: Stakeholder Analysis Matrix

The Problem Tree

You may have already identified a general problem facing the community you will be working in, or you may be responding to a request that has outlined the problem for you. A great way to further hone and detail your project intervention priority is to use a **Problem Tree**.

When developing a problem tree, it is important to begin the process with the identification of the 'core problem' that can be either identified via an open brainstorm process with stakeholders or pre-identified, based on preliminary analysis of existing information. Once the core problem is identified, the process of elaborating the subsequent problem tree is completed (preferably via a participatory group process) using these instructions:

- Problems which are directly causing the starter problem are put below (causes);
- Problems which are direct effects of the starter problem are put above (effects).

The guiding question behind the logic of the problem tree is 'What causes that?' If there are two or more causes combining to produce an effect, they are placed at the same level in the diagram. Cause-effect arrows are used to connect the levels of the problem tree.

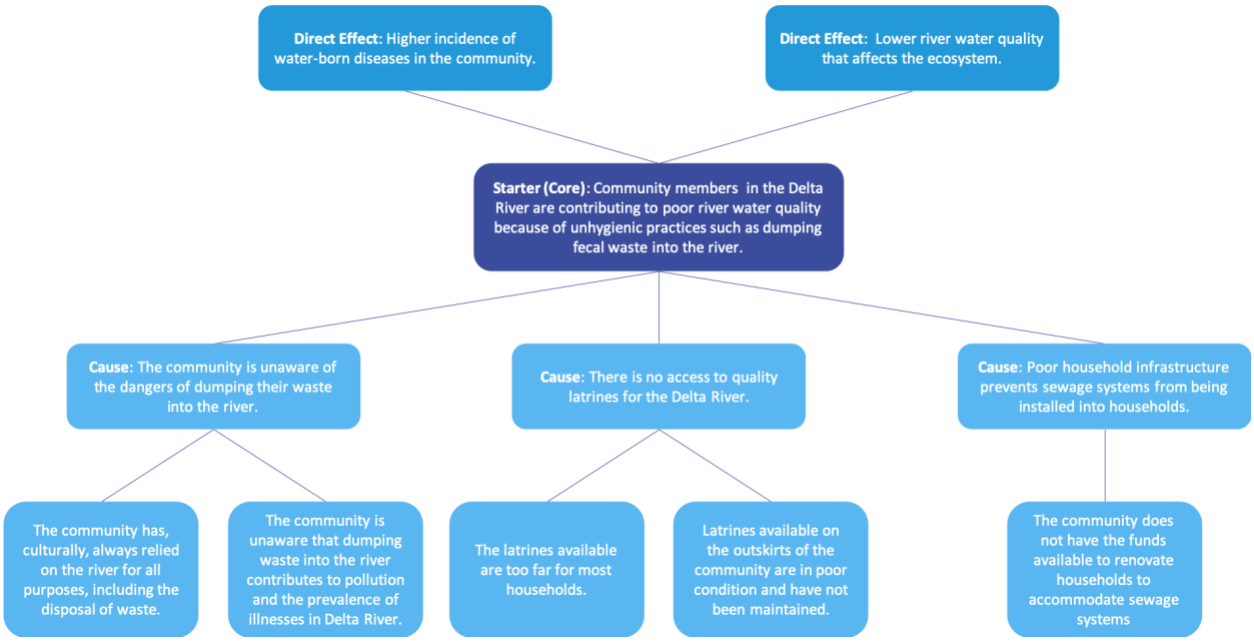


Figure 18: Delta River Problem Tree

For our latrine project, the starter problem is that community members in Delta River are contributing to poor river quality because of unhygienic practices such as dumping fecal wasted into the river. From there, three primary causes have been identified:

1. The community is unaware of the dangers of dumping their waste into the river.
2. There is no access to quality latrines for the Delta River.
3. Poor household infrastructure prevents sewage systems from being installed into the households.

The result, or direct effects, are that the Delta River has a higher incidence of water-borne diseases in the community and the river has a lower quality which affects the ecosystems.

This version of the problem tree is simplified, additional levels could be added to get to the absolute root causes of the starter problem. It is also important to keep in mind that you want to explore the problem as a whole and not only in relationship to preconceived ideas of what kind of intervention you can do but rather to explore the root causes and effects of the problem at large. A participatory

approach is incredibly helpful in this exercise, providing insight and assisting in breaking down the problem into more detailed causes.

Future State Analysis

The Objectives Tree

Once a problem tree is completed, the next step is to develop an **objectives tree that begins to identify the potential interventions that could take place to "fix" what is broken in the problem tree**. In its simplest form, the objectives tree is a mirror image of the problem tree – where each statement in the problem tree is transformed into a positive objective statement. While the problem tree displays cause and effect relationships, the objective tree shows the 'means-to-end' relationships.

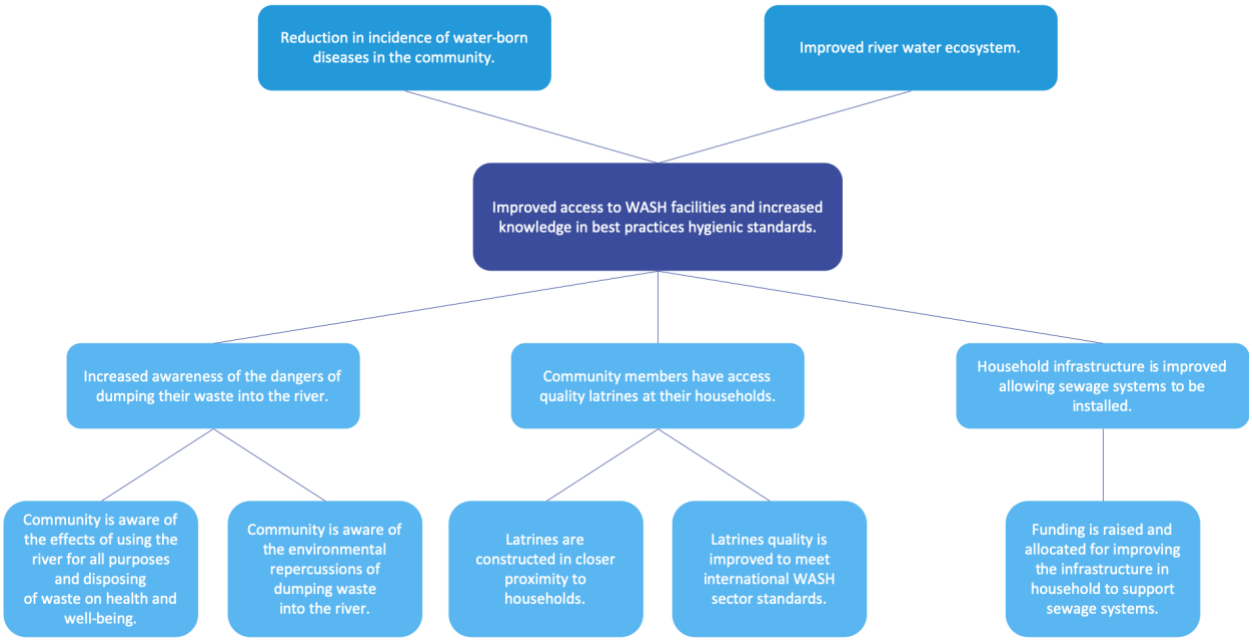


Figure 19: Delta River Objectives Tree

Once the broad collection of needs is identified the next challenge is to analyze the needs that were identified and to determine whether there is adequate justification for a project intervention.

At this point, the development organization should consider two critical strategic questions:

- Which elements of the objectives tree will be included in the project intervention?
- Which elements will not be included in the scope of the project?

Gaining consensus from stakeholders on these questions may be difficult and the decision-making process has the potential to become quite complex and contentious.

These questions will help guide the project team and stakeholders in making decisions regarding where the project intervenes, the services it provides, who will be served, and how the services are provided.

Returning to the Delta River project, the scope selection criteria needs to include resource availability, implementing organization capacity, priorities of the local government, and household needs. Another consideration to explore is the interventions that other NGOs and organizations are implementing in this community. Based on these criteria, the project team developed a **solutions / alternatives tree which**

communicates the outcomes and goals (see the lighter blue boxes in the image below) that need to be pursued solve the core problem. It is important to note that the alternatives tree also communicates which elements will not enter in the scope of the project (the orange boxes in Figure 20).

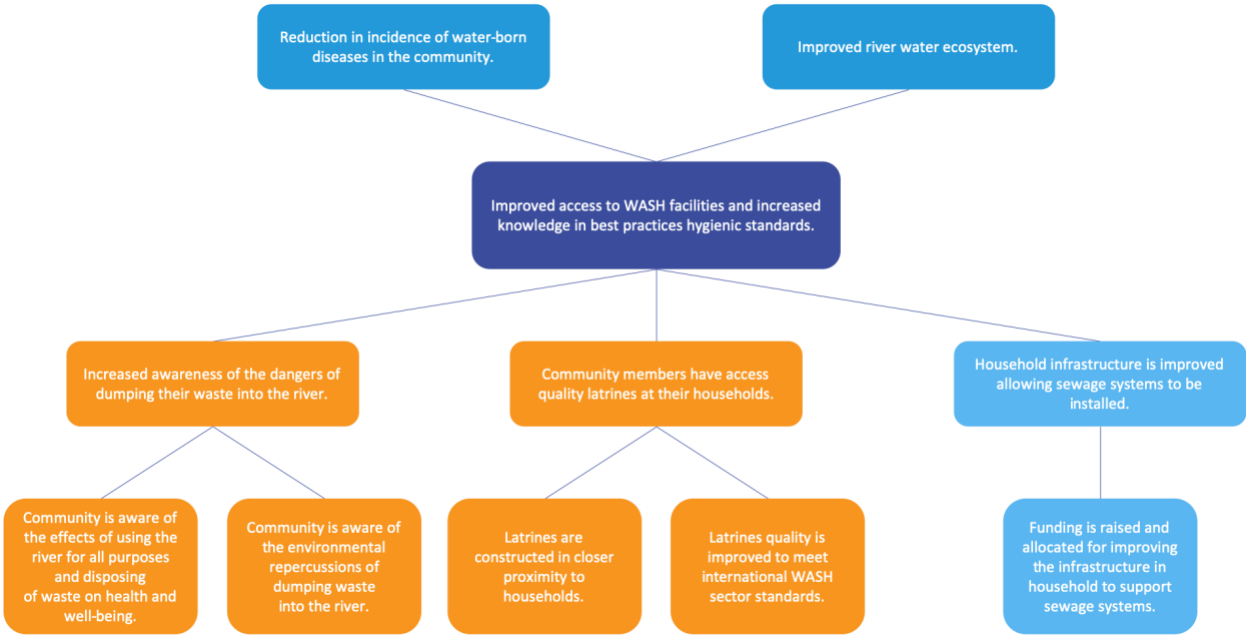


Figure 20: Delta River Solutions / Alternatives Tree

In practice, future state analysis is seldom simple. While a future state analysis might identify a broad array of potential interventions for a project, it is seldom the case that an organization can implement all the activities outlined in the future state analysis. At this point, the development organization should consider three critical strategic questions:

- Which elements will be included in the project intervention?
- Which elements will not be included in the scope of the project?
- What are the criteria which will be used to make these decisions?

These questions may prove to be difficult and organizations will be confronted with numerous alternatives. Concrete decisions about the scope of the project must be outlined. Where will the project intervene? What services will be provided? Who will be served?

Collective Impact and Scope Analysis

It is critically important to be aware of what other interventions are being conducted by other organizations and NGOs with the targeted beneficiaries in the community. It is likely that your organization will not be able to pursue all intervention lines on the Objectives Tree because they don't fit within the expertise, priorities, or strategy of the organization. However, there may be other organizations that do have the expertise and ability to pursue the interventions your organization cannot. With that being said, there is the possibility that you could coordinate, communicate, and collaborate with others to work towards collective impact for the community.

Consensus on these questions may be challenging and the decision-making process has the potential to become quite complex and contentious. Consequently, it is important that the project team clearly identify and prioritize the multiple considerations that come into play when deciding what will be included in the eventual project, and what will be left out.

Table 11 outlines that components that should be considered when determining which intervention(s) to pursue and what will be in scope and what will be out of scope.

Category	Guiding Questions
Needs Prioritization	What needs received the highest level of emphasis during the assessment/analysis? Addressing which needs would appear to have the highest potential for impact?
External Program Considerations	Who else is working in the proposed area of intervention? What are their program strengths? What existing activities complement the objectives tree analysis?
Appropriateness	Is the proposed approach acceptable to the target population and key stakeholder groups? For example, would a reproductive health program be appropriate and consistent with religious and cultural norms?
Institutional Capacity	What are your organization's strengths? What are your implementing partner capacity levels?
Resource Availability	Is funding available? Is there potential for growth? What opportunities exist to leverage resources?
Cost-Effectiveness	Is the rate of return for the investment acceptable?
Technical Feasibility and Sustainability	Can the proposed work be realistically accomplished? Can the work of the project be sustained and maintained over time?
Internal Program Considerations	What are the strategic priorities for your organization in the region? Country? Other? What are the program strengths of your organization? What priorities does your organization have with regard to geography? Beneficiaries? Other?
Portfolio Considerations	Does the project 'fit' within the larger portfolio of projects in the organization?

Table 11: Scope Analysis

Priorities and Expectations in Establishing the Scope of Work

Identifying the needs and priorities for an intervention can be complicated. What happens if your needs assessment, the requests from the donor, and the feedback from beneficiaries don't align? What do you do? This can be a really challenging scenario and the decision of which priority or need to accommodate should not be left up to the project manager alone. Stakeholder and project governance engagement is critical when there are competing priorities. A discussion should be held to further examine the needs, priorities, and expectations of the various stakeholders so that the project team has clarity on which direction to pursue.

Project Intervention Logic

Once you have identified the intervention you will pursue, it is time to outline how it will lead to the outcomes you desire. For this we use the logical framework.

The **logical framework matrix identifies and communicates the logical relationships in a project by tracking the vertical and horizontal reasoning that connects the levels of the matrix.** The relationship between the elements on each level of the logical framework illustrates the vertical logic that will result in the achievement of the project's ultimate goal.

While there are many versions of project logical frameworks, the Project DPro subscribes to a four-level logical framework model that includes the following deliverables:

Variations of the Logical Framework

Logical frameworks can be overwhelming, primarily because it seems that every donor and organization uses a different version. The differences between logical frames from organization to organization is usually just terminology. The vertical and horizontal logic remains the same regardless of the terms used to describe each level.

1. **Activities** are actions taken through which inputs (financial, human, technical, material and time resources) are mobilized to produce the deliverables (training, constructing, etc.) of a project for which staff can be held accountable and which, when aggregated, produce outputs.
2. **Outputs** are tangible and non-tangible deliverables resulting from project activities. They include products, goods, services and changes (e.g., people trained with increased knowledge and skill; quality roads built) that aggregate and contribute to outcomes.
3. **Outcomes** are what the project expects to accomplish at the beneficiary level (e.g., use of knowledge and skills in actual practice over time; transportation of goods on constructed roads over time) and contribute to population-level changes (reduced malnutrition, improved incomes, improved yields, etc.) that aggregate and help bring about accomplishment of goals and impact over time.

4. **Goals** are the highest-level desired end results or impacts (transformation, sustainability, livelihood, well-being, etc.) to which the project contributes (the ultimate objective in many logical frameworks). An example of this would be a sector-level goal or program level outcome.

As a project manager, your primary responsibility is at the activity and output levels, as these are what you have control over at the project level. If your vertical logic is sound and your horizontal logic (which we will discuss later in this chapter) remains, you will achieve your outcome. This exercise builds upon the work you did in the Future State analysis in that it provides a direct line from the selected intervention to contributing to the core problem.

	Project Description	Indicators	Means of Verification	Assumptions
Goal	If the OUTCOMES occur; Then this should contribute to the overall GOAL			
Outcome(s)	If the OUTPUTS are produced; Then the OUTCOMES can occur			
Outputs	If the ACTIVITIES are conducted; Then OUTPUTS can be produced			
Activities	If adequate RESOURCES / INPUTS are provided; Then the ACTIVITIES can be conducted			

Table 12: Vertical Logic of the LogFrame

According to the intervention identified and defined using the current and future state analysis, the vertical logic of our Delta River Latrine project may look something like what is listed below. This is not a comprehensive description of the objectives by any means but is provided as an example to illustrate the "if-then" relationship of our project.

	Description
Goal	To improve the quality of river water in the Delta River.
Outcome(s)	Improved access to quality latrines for the Delta River community.
Outputs	1.1 Quality latrines are constructed 1.2 Local municipality trained on the maintenance of the latrine. 1.3 Delta River community advocates trained on value and use of latrines.
Activities	1.1.1 Latrine specifications and locations are designed confirmed in coordination with the engineering team. 1.1.2 Build the latrine cap and structure. 1.1.3 Install the latrine structure and conduct a quality check.

Table 13: Logframe Descriptions

Having defined the project goal, outcomes, outputs, and activities, the next question posed is 'What could potentially (usually outside the project's control) interfere with the project's vertical logic?' At each level of the logical framework, there are external factors that may affect the success of the project, these are the assumptions. Assumptions complete the horizontal logic of the logical frame and must remain true in order for the activities to lead to the outputs and the outputs to lead to the outcomes. An assumption is a hypothesis about necessary conditions, both internal and external, identified in a design to ensure that the presumed cause-effect relationships function as expected and that planned activities will produce expected results.

	Project Description	Indicators	Means of Verification	Assumptions
Goal				
Outcome(s)				If the horizontal logic is followed AND assumptions hold true, then the project will likely succeed.
Outputs				
Activities				

Table 14: Horizontal Logic of the LogFrame

It is important to really think about the assumptions in the logical frame. If these conditions do not hold true, the success of your project will be compromised. Assumptions are usually positively phrased and are directly related to your project activities, outputs, outcomes, and goal. The assumptions are also a great way to start thinking about the risks in your project. Think of them as an "if-AND-then" relationship. If we complete our outputs AND our assumptions hold true, then we will achieve our outcomes.

Objective	Assumption
Outcome: Increased economic empowerment of farmers through improved barley crop yields.	
Output: Farmers provided with quality barley seeds to plant.	Weather conditions remain favorable for seed germination. There are no droughts or floods.

Table 15: Assumptions Example 1

Objective	Assumption
Outcome: Improved nutrition for the most vulnerable children.	
Output: Children are provided with 3 nutritionally complete meals per day.	There are no underlying health conditions preventing children from absorbing the nutrients in the 3 complete meals per day.

Table 16: Assumptions Example 2

It is especially important to focus on the assumptions at the output and outcome levels in the logical framework. The assumptions found at these levels form the foundation of the logic of the project intervention. It is here that the connection is made between the deliverables produced at the outputs level and the social change that is desired at the outcome level. If we go back to our Delta River Latrine Building project, the outputs of the project are:

1.1 Quality latrines are constructed.

1.2 Local municipality is trained on the maintenance of the latrine.

1.3 Local community advocates are trained on the value and use of the latrines.

The assumption at the output level is that increased availability of latrines and increased awareness of latrines will significantly increase the use of latrines – thereby improving the water quality and health of the community.

After objectives have been established and associated risks and assumptions identified, the final element of the logical framework is the **indicators** of achievement and **means of verification** for each level of the logical framework.

An indicator is a quantitative or qualitative measure used to describe change. For the indicator to measure change, it must have a baseline (a measure or description of current performance of the entity and/or a comparator) as an initial reference point. Baselines must be defined at or near the beginning of a project. Performance during project implementation is measured against a target (the improvements, change or achievement expected to happen during project implementation), taking into account the baseline.

Indicators depict the extent to which a project is accomplishing its planned inputs, outputs, outcomes and goals. They communicate in specific, measurable terms the performance to be achieved at each level of change. Indicators also help to remove vague and imprecise statements about what can be expected from project interventions.

Table 17 provides guidelines for indicator development at each of the logical framework levels.

Elements	Indicator Guidelines
Goal – The ultimate objective or highest-end result or impact to which the project contributes	Indicators are longer-term impacts that are not specific to a single project. Rather, they are program, subsector, or sector objectives to which several other projects and variables will also contribute. Examples: transformation, sustainability, livelihood, and well-being.
Outcomes – What the project expects to accomplish at the beneficiary level that aggregates and help bring about accomplishment of goals and impact over time	indicators at this level are crucial but can be more difficult to determine. Change is sought among extended beneficiaries, target populations, collaborating institutions and local partners. Examples: use of knowledge and skills in actual practice over time; increased access, reduced malnutrition, improved incomes, and improved yields.
Outputs – The tangible deliverables resulting from project activities and which are largely under project managements control – that aggregate and contribute to outcomes	indicators at this level are easier to specify than at the outcome level because they represent tangible goods and services to be delivered by the project. All outputs have to be accomplished by the end of the project's implementation period and according to the schedule included in the project plan. Examples: people trained with increased knowledge and skill; quality roads built, goods delivered and services performed.
Activities – The actions taken through which inputs are mobilized to produce deliverables for which staff can be held accountable – and which, when aggregated, produce outputs.	Not all development organizations develop indicators at the activity level. Indicators at this level are almost directly related to the description of the activity itself. Examples include: staff activities, actual expenditures compared to budget, use of equipment, training components and construction components.

Table 17: Indicator Guidelines by Logical Framework Level

When developing indicators, the norm is to use SMART criteria to guide performance indicator conceptualization. SMART is an acronym with the following meaning:

- **S**pecific – Indicators must be specific and focus on the change that is expected at each level. What or who is changing?
- **M**easurable – The indicator must be quantifiable and measurable. Can the indicator be assessed objectively and independently?
    - Quantity – the expected numerical representations of what is to be achieved;
    - Quality – the narrative or pictorial description of the expected achievements;
    - Location – the geographic boundary of the expected achievements.
- **A**chievable – Indicators must be attainable within the constraints of the project triangle (budget/resources, time/budget, and scope/quality).
- **R**elevant – Indicators must accurately measure the change the project aspires to generate. Does the indicator practical and cost-effectively measure the outputs, outcomes, and/or goal?
- **T**ime-bound – The indicator should identify a specific time and date. By when will the indicator be achieved? Can the indicator be achieved within the established timeframe?

Indicator Disaggregation

Disaggregation of indicators is when you break the indicators into categories for a more robust analysis. Some examples of how indicators can be disaggregated are by: gender, geographic location, socio-economic status, and age group. Keep in mind that the disaggregation is intended to provide a better understanding of the changes happening at the level of each category. The disaggregation will depend on the indicator and what kind of information is required for a deeper analysis.

Taking our Delta River Latrine Building project for example, one of the indicators at the outcome level is the % increase in the use of latrines by the end of the project in comparison with before the project. It may be beneficial to disaggregate this indicator by gender and age group to examine if any of these groups (men or women, young, middle-aged, elderly) are not using the latrines.

Means of Verification (MOV) are the sources from where we get the information to measure our indicators. Means of verification should be cost-effective and should directly measure the indicators. The best advice for indicators and MOV is to keep it simple. The more complex the indicator, the more complex (and subsequently, challenging to measure) the MOV.

Table 18 illustrates a partial build out of the project logical framework related to the Delta River Latrine Building Project case study introduced previously. The contents of this logical framework provide examples of the vertical and horizontal logic of the project and also provide examples of the assumptions and indicators found at each level of the logical framework.

	Description	Indicators	Means of Verification	Assumptions
Goal	To improve the quality of river water in the Delta River.	% reduction in the presence of pollutants in the Delta River.	Water Quality Tests	No need for assumptions at this level
Outcome(s)	Improved access to quality latrines for the Delta River community.	% increase in the use of latrines by the end of the project in comparison with before the project. % of community members who express satisfaction with the distance, quality, and condition of the latrines by the end of the project.	Survey Data Focus Group Discussions with Community	There are no additional sources of pollution in the Delta River. Latrines are maintained by the municipality to ensure they continue to function at the highest quality possible.
Outputs	1.1. Quality latrines are constructed 1.2. Local municipality trained on the maintenance of the latrine. 1.3. Delta River community advocates trained on value and use of latrines.	1.1. # of latrines constructed within 50 meters of households by the end of phase 2 of the project. 1.2. # of municipality staff trained on who demonstrate knowledge of technical maintenance of the latrines by the end of the project. 1.3. # of community advocates trained on and demonstrate knowledge of the usage and value of latrines by the end of phase 1.	1.1. Engineering survey data 1.2. Training attendance sheets and pre / post assessment 1.3. Training attendance sheet and pre / post assessment.	1.1. Access to the latrines and awareness of benefits will ensure that the community uses the latrines. 1.2. Municipality staff remain in their position and transfer the knowledge of maintenance to new staff members. 1.3. Community advocates have enough power and influence to convince the community to use the latrines.
Activities	1.1.1. Latrine specifications and locations are confirmed in coordination with the engineering team. 1.1.2. Build the latrine cap and structure. 1.1.3. Install the latrine structure and conduct a quality check.	Inputs: Latrine construction materials, WASH engineer, training curricula on latrine maintenance, advocacy materials		

Table 18: Delta River Latrine Building Project Logframe

There are a few logical frame components included in our Delta River example that are important to point out. The first is output 1.2: Local municipality trained on the maintenance of the latrine. This is an output that is directly related to the sustainability of the project. We will discuss sustainability as we move through the guide, but it is important to note that the sustainability of the project, and the plan for the continuation of the product or services after the completion of the project, is considered even at the earliest stages in the project.

The other component you may notice is in the output indicator 1.1: # of latrines constructed within 50 meters of households by the end of phase 2 of the project. This is a gender-responsive WASH (Water, Sanitation, Hygiene) indicator[3], which is something you may need to consider when you are identifying and defining your project logic. Gender-mainstreaming has become common practice in the development and humanitarian sectors and ensures that we account for the specific needs of all people, focusing on gender equality. Specific methodologies and indicators may need to be incorporated into your project to ensure a gender-mainstreaming approach. In this example, the indicator is a standard gender-responsive indicator for the WASH sector. Experts have established that distance is a huge factor in women and children's ability to access WASH facilities so the latrines should be constructed no further than 50 meters from households.

Be aware that the logical framework is a living document and should be updated if any changes are made in the project and through consultation and appropriate approval and justification processes. This is also a tool that can be used in the monitoring and evaluation as well as the planning of the project. Keeping it "alive" and regularly updated is essential as you move through the project.

High-Level Analyses (Estimations)

During the Identification and Definition phase, it will be beneficial to include high-level (estimations) analyses to support the definition of the intervention as well as to help in the proposal writing process – if that is required. At minimum, the following analyses should be conducted: stakeholder, risk, human resources, supply chain, and sustainability.

Whenever you are conducting an analysis, you should involve a variety of stakeholders in the process to better ensure a more robust analysis. For example, if examining the human resource needs for the project, involve a focal point in the Human Resource Department within your organization. Including these stakeholders early sets the tone for their involvement and participation for the rest of the project.

Start the Work Early

It is at this phase of the project that you want to start making decisions on how you envision the project will move forward. For example, what kind of governance structure will be most effective and appropriate? Which project management tools are a priority to use? You need to start thinking about the framework for the project, even at this early stage. The reality is that there is often little time between the approval of a proposal and the expected implementation of the project. If you stagger out your analyses and start the work of developing the project early on, the process from proposal approval to the setup, planning, and implementation of the project will be more balanced and comprehensive, leading to a smoother transition between the phases.

[3] https://www.unicef.org/gender/files/Gender_Responsive_WASH.pdf

Risk Analysis

Comprehensive risk assessment and management are essential to project success, but often overlooked or perceived as something that is done for compliance purposes in the proposal writing stage. In the Identification and Definition phase, your primary task will be to begin to explore the potential risks associated with your project.

When exploring the risks for your project, it is important to acknowledge that each project is unique, and it isn't possible to develop a single set of risk categories that would fit all organizations and projects. Project teams must survey the context of their specific project and develop a set of risk categories that is appropriate to their unique needs. Some potential categories of project risk include:

Strategic/commercial

- Failure of suppliers to meet contractual commitments
- Fraud/theft
- Implementing Partners failing to deliver the desired outcome

Economic/financial/market

- Exchange rate fluctuation
- Interest rate instability
- Inflation
- Market developments adversely affect plans.

Legal and regulatory

- New or changed legislation invalidates project assumptions
- Failure to obtain appropriate approval (e.g., planning, consent)
- Unsatisfactory contractual arrangements

Organizational/management/human factors

- Poor leadership
- Inadequate authority of key personnel to fulfill roles
- Poor staff selection procedures
- Lack of clarity over roles and responsibilities
- Personality clashes
- Lack of operational support

Political

- Change of government or government policies
- War and disorder
- Adverse public opinion/media intervention
- Interference by politicians in development decisions

Environmental

- Natural disasters
- Sudden changes in weather patterns

Technical/operational/infrastructure

- Inadequate design
- Scope creep
- Unclear expectations

Project Management Risk

- Lack of planning, risk analysis, contingencies
- Inadequate tracking and control response
- Unrealistic schedules
- Poorly managed logistics
- Delays in the approval of project documents

Together, with a variety of stakeholders, brainstorm the potential risks that could affect your ability to deliver the project on time, on budget, within scope, and with the highest quality possible.

Human Resource Analysis

The Project Team

Human resources and the supply chain are two project components that often cause delays and issues in the project schedule. However, these departments or leads are frequently not included in the project until the implementation phase. Engaging in the human resource assessment process in coordination with the HR department early in the project will help reduce the potential issues and challenges later on in the project. At this point, the project manager may not have been identified and hired, so assessing the needs is especially important in ensuring a smooth transition once the project manager has been brought on-board.

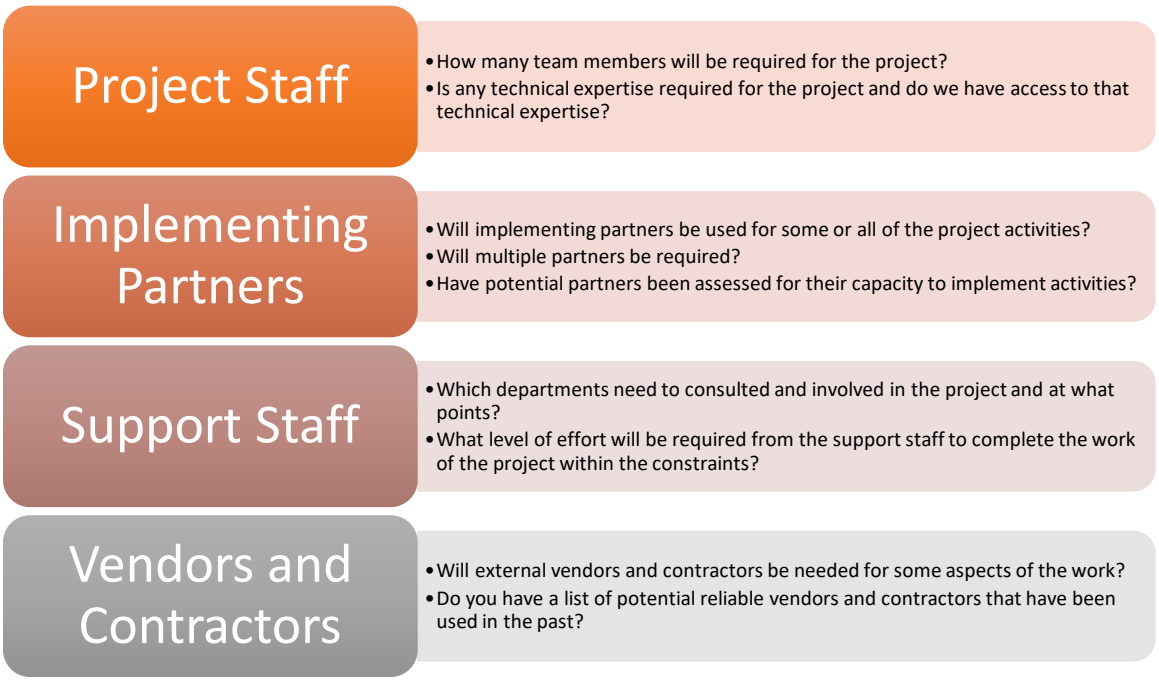


Figure 21: Project Human Resources Needs

Roles and Responsibilities

As you determine which project team members will be required for the intervention, you will want to begin to outline the capacity requirements and roles and responsibilities of those team members. It is at this point that job descriptions and project hierarchical (organogram) charts should start to be developed – which may also be a requirement for a project proposal. Working with the HR department and other relevant stakeholders at this point will be useful in identifying which team members will be needed and when.

Project Team and Level of Effort (LOE)

It may be the case that your project team is working on several projects at any given time. This is the reality for many local and implementing partners. As you begin to assess the human resource needs for the project, you must be aware of the level of effort each team member will contribute throughout the life of the project. The level of effort should be clearly articulated and considered when outlining the roles and responsibilities and is usually included in the budget section of the proposal.

You will also want to think about the kind of governance structure you will have for the project. Will it be a project board that consists of a variety of stakeholder perspectives? Or is a project sponsor more practical? How will you engage with the governance, what kind of tolerances should be in place for the project management? All of these questions should be considered at this phase and will be further detailed in the Setup phase.

Project Team Capacity Requirements

When developing the job descriptions, tasks, and duties for the project team, it is also important to take into account the skills and competencies that are required for each position. Working with the HR Department, outline the core competencies and skills for each position, both the technical and the soft skills required. If the team members have already been hired, this exercise would still be helpful in determining if the project team needs training or even new members.

A good way to examine the human resources component of the project at this point is by using the questions below to guide you:

- ✓ What kind of governance structure would be most practical and appropriate for this project?
- ✓ What is the reporting structure within the project team and with support staff?
- ✓ What kind of level of effort will be required of each team member?
- ✓ What kind of skills and capacities will be required from team members to promote an efficient team environment and to complete the work effectively?

Working with Implementing Partners

In some cases, implementing partners will be part of the equation, so it is essential to also assess their capacity and understand what skills and knowledge will be required for them to effectively complete their part of the project. Starting this process early (whether that be doing an organizational capacity assessment or providing templates and capacity building on tools) will be beneficial as the project moves forward.

Supply Chain Analysis

Another project component that often causes delays is the supply chain. In many cases, this is not the direct result of an ineffective and inefficient supply chain team, but rather due to a lack of involvement in the project definition and planning processes.

In the Identification and Definition phase, you are starting to put the project together, like laying out the pieces of a puzzle, so establishing what may be required for procurement, what kind of logistics systems should be in place, and how you will manage the project assets is essential.

The Project DPro defines three components in supply chain management:

Procurement Management – including the identification of what materials and services are needed, when they needed, and identifying how it will be acquired and by whom. The procured plan also needs to be integrated with all of the other elements of the project plan to ensure that all procurement decisions are aligned with the project's budget, calendar, quality and risk parameters.

Logistics Management – including planning, implementing and controlling the efficient, cost-effective flow and storage of raw materials, in-process inventory, finished goods and related information from the point of origin to the point of consumption for the purpose of conforming to customer requirements.

Asset Management – including the systems whereby things that are of value to a project are monitored, maintained and disposed.

The project manager is responsible for making sure that these components are identified, defined, planned for, and well managed throughout the entire life of the project in close coordination with the supply chain team.

Financial Analysis

At this stage, you may be requested to do a proposal to obtain funding. It would be beneficial to begin developing a high-level budget at this point based upon the information that is available. For example, the general product scope has already been established and there is clarity on the high-level activities that will be required to achieve the outputs. There should also be a general understanding of the human resources, supplies and materials, and technical requirements that the project will need.

The budget will be further detailed in the Project Setup and Planning phases when more information about the project is provided and the comprehensive scope of work has been established.

Sustainability Analysis

Sustainability has become a key focus of projects in the development sector in recent years. Stakeholders want to ensure that the project and results of the project will be carried on after the project has ended. However, we often don't start thinking about sustainability until the project is close to completion.

Sustainability and Projects

Depending on the kind of project you are doing, sustainability may be more of a focus. For example, if you will be executing a humanitarian relief project, there will likely be no sustainability factor because the nature of these projects is to provide the most urgent and essential services (food, protection, water, shelter, health). However, if your project is more development focused, sustainability ought to be considered in the definition, planning, implementation, and closure of the project.

At this point in your project, however, you will want to think about what will take place after the completion of your project. Will you look to expand the project to other areas? Are you going to hand this project over to a local government or organization? If that is the case, will they be able to continue the product or service after the project has ended? What kind of lasting effect will the intervention have on behavioral change or on the social conditions and context? Does the design of the project factor in the long-term or is it a short-term fix? In what way does this project contribute to the goal and will products or services require work to be done throughout the project to better ensure the sustainability?

As you move through the identification and definition of your project, begin to think about these questions and integrate the answers into your project components. If you remember from the logical frame, there is an output that takes into consideration the sustainability of the project. By training the local municipality on the maintenance of the latrines, we are better ensuring that the latrines will

continue to be maintained and that the intervention will be sustained. This indicator is an example of a step that can be taken to start to set the framework for sustainability in the project. However, additional considerations and actions will need to be completed in later phases to establish a comprehensive approach to sustainability.

Theory of Change

Something else to examine for when considering the project sustainability is the Program Theory of Change. A Theory of Change is most often done at a program level, not at a project level. However, the project manager and team should be aware of how their project fits into the bigger picture represented in the Theory of Change at the program or institutional level.

The following Theory of Change example is for the Delta River Program. The ultimate change that is expected is that the *Delta River quality is improved providing a healthy ecosystem to support the fishing industry and reduce the incidence of water-borne diseases in the community*. Obviously, the Latrine Project alone will not achieve this change but will require several interventions to achieve the ultimate goal.

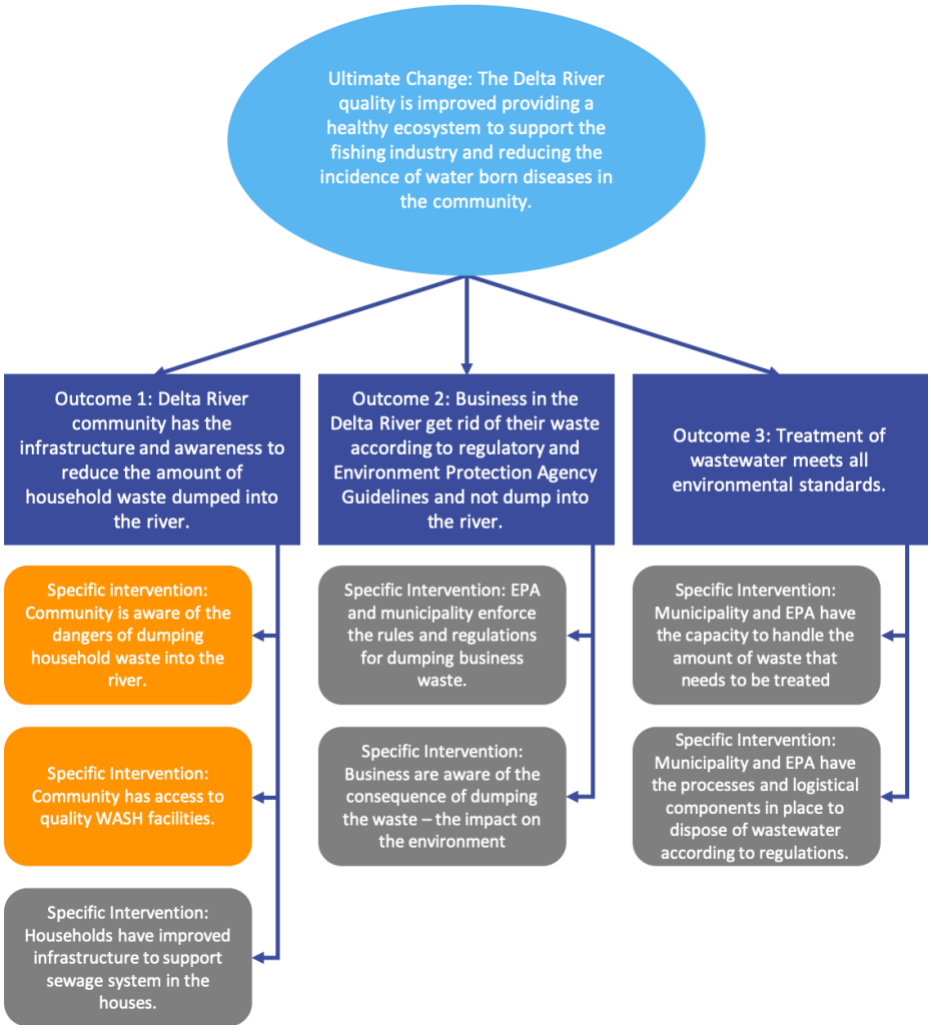


Figure 22: Delta River Program Theory of Change

As illustrated in the high-level Theory of Change above, multiple outcomes will be required to achieve the ultimate goal and under each of those outcomes, several interventions will need to be implemented. The interventions in the orange boxes are directly related to our Delta River Latrine Building project. The project fits into the Theory of Change as outlined by the program and will contribute to achieving the programmatic outcome (Outcome 1) and also contribute to the ultimate change expected.

Draft Project Charter

As you move through this phase, you can start to outline the Project Charter, which is a 3 to 5 page document that has the basic information about the project such as budget estimations, scope estimations, tolerances, information on the team, and so on. The Charter will be finalized during the Setup phase, but it is always good to get a jump-start on developing these tools as you go.

Project Proposal (Project Design Documents)

The result of all of the processes is often a project proposal. The proposal will require that you investigate the information needed to comply with all of the components as outlined by the funder or donor. It is really important to make this process as participatory as possible so that the proposal can better reflect the reality in the project and on the ground.

Reality Check: Proposals

You can almost hear a 'collective groan' when the word proposal is mentioned. Proposals provide a unique challenge in that you are expected to present a high-level overview of a project in a short period of time. There is little opportunity for collaborating with stakeholders and usually, you haven't had the opportunity to fully develop the project concept.

You may wait for weeks or even months to get approval for the proposal and when it finally does get approved, you are expected to begin implementation the next week. Does this sound familiar?

The reality is that it is challenging to meet required deadlines when it comes to proposals and even more challenging when a quick turnaround – between approval and implementation – is expected. For this reason, the project team must do the groundwork during the proposal writing stage to ensure that estimates for the schedule are as accurate as possible. Will the estimates change? Likely, as the context may change and so may the scope of the project – depending on the results from the proposal acceptance process.

Reflections on Identification and Definition – Doing the Right Project

The reality is, the Identification and Definition phase can be really challenging for organizations and project teams. Often times, the donor has already identified the intervention and the project team has little autonomy over choosing the activities and the beneficiaries. In other cases, the timeline from idea to proposal is incredibly short leaving little room for proper analyses. So, what can we do? It seems like an impossible scenario.

You have to work within the constraints that you have. Sometimes that might mean using secondary sources to validate needs rather than doing primary data collection. In other cases that might mean getting the project team and stakeholders in one a room for an afternoon to 'hash it out', doing a quick problem/objectives tree, reviewing data, and mapping stakeholders.

Regardless of the constraints, it is important to ensure that the processes and potential are well thought out during this phase. Failure to comprehensively examine the needs, stakeholders, problems, and potential interventions will have a domino effect on the rest of the project. Remember, the results of this phase will help to ensure that we are doing the right project. Including a variety of stakeholders in the process and making this phase as participatory as possible will also enrich the results, exploring problems, needs, and interventions through multiple lenses.

2.2 Project Set Up

What We Cover in this Chapter:

- ✓ Preparing the project for planning, implementation, and management.
- ✓ Comprehensive risk assessment and management strategy.
- ✓ Stakeholder engagement for project activities.
- ✓ Project governance structures, roles, and responsibilities.
- ✓ Outlining the planning framework.
- ✓ Developing the MEAL framework.
- ✓ Developing the Project Charter.
- ✓ Launching the project.

"First, have a definite, clear practical ideal; a goal, an objective. Second, have the necessary means to achieve your ends; wisdom, money, materials, and methods.
Third, adjust all your means to that end." – Aristotle

2.2.1 Introduction

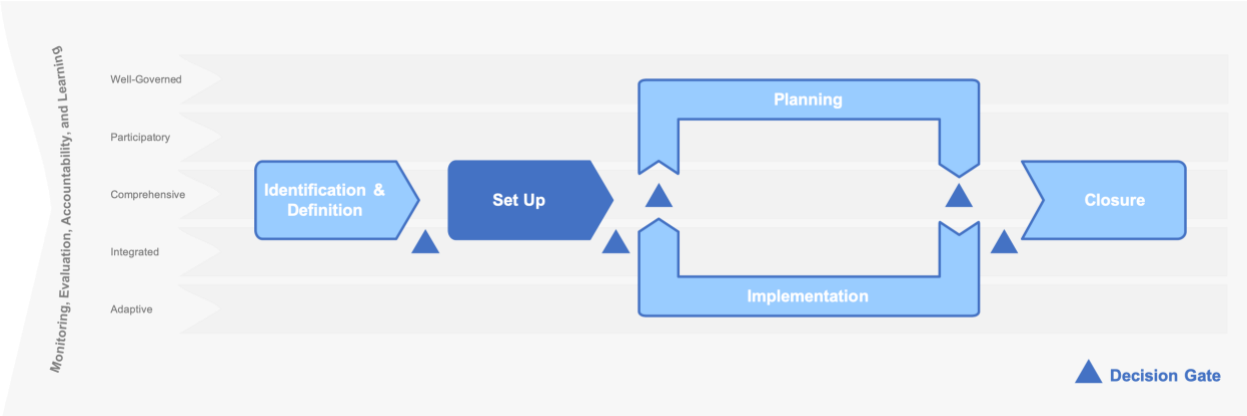


Figure 23: Project DPro Phase Model – Set Up

The purpose of the Project Setup phase is to prepare the project team members and stakeholders for planning, implementation, and good project governance. While this might seem redundant, the setup of the project is crucial for ensuring that the project team is prepared to begin the planning process. Much of the work done in the Identification and Definition phase are further detailed in Project Setup, providing a solid foundation for the project team to begin move forward with the project in a systematic and comprehensive manner.

This phase also provides the opportunity for the project manager, governance, and relevant stakeholders to ensure that the project remains valid, is appropriately directed, and that there is a comprehensive risk management strategy in place. In essence, this phase will set the foundation and create the conditions needed to better ensure that the project is successfully delivered.

At this point you have either secured the project funding source or are in negotiations with the potential donor. It is also during this phase that the project manager receives the authorization to officially start the project. The Setup phase is also where we need to think about how the project will be managed and which tools and plans will be required. Some examples could include: sustainability strategy, stakeholder management strategy, communication strategy, risk management, supply chain management strategy, and a human resource strategy. Not every project will require the same level of planning. However, the Setup phase provides an opportunity to come to an agreement on which tools will be used and how they will be used. It is also during this phase that we begin to think critically about the monitoring and evaluation framework, knowledge management framework, and detail the project management tools that will be used throughout the project. Keep in mind that the program manager may need to be involved.

Reality Check: Project Manager and Setup

It is possible that the project manager will not have been hired by the time you reach the Setup phase. Recruitment processes can take time and organizations may not want to hire a project manager until a contract for funding has been signed. While the project manager may not be on board, there should be a focal point who is overseeing the processes and ensuring that everything that needs to be documented is so that when the project manager does come onboard, there is clarity as to what tasks have been completed and which processes are in place.

2.2.2 Key Outputs

Project Charter

A "living" document that provides a high-level description of the project and which is signed and approved by the project governance. This document basically acts as a project information sheet, outlining all the important information about the project that can be referenced by the project manager and other stakeholders. Some of the information to include would be: budget estimates, high-level deliverables, risks, project governance structure, project manager tolerances, project timeline, and a brief project description.

Comprehensive Risk Register

Risk identification began in the Identification and Definition phase but will be further analyzed during this phase, establishing a clear-cut strategy for each risk. During Setup, the project manager will need to make more concrete decisions as to how the risks will be managed and how frequently the risks will be reassessed throughout the life of the project.

Stakeholder Engagement Strategy

A detailed stakeholder engagement strategy is developed during the Setup phase, building on what was done in the Identification and Definition phase when stakeholders were analyzed according to their power, influence, relationship, and impact on the project. In the Setup phase, information on stakeholders is further detailed and a strategy is developed for engaging stakeholders is completed.

Project Launch

The launch of the project occurs at the end of this phase, ensuring that all stakeholders are aware that the project will begin (and when it will end) and also have a high-level understanding of the scope of work and timeline for the project.

2.2.3 Who is Involved in this Phase

Multiple stakeholders will continue to be involved in this phase, providing insight and direction on detailing the project components and setting the foundation for planning and the management of the project during implementation. Depending on your project, you may include beneficiaries and community members in some of the processes during Project Setup. However, at minimum, the following stakeholders should be included:

- **Project Governance:** Whether a project board, sponsor, or steering committee, input from the project governance will be essential in establishing tolerances and providing feedback on components such as risk, stakeholder engagement, the planning framework, and monitoring and evaluation.
- **Project Team:** Including the people who will be doing the work of the project will enhance the analyses that are conducted in this phase. Don't forget to include project support staff (human resources, finance, and supply chain) as well.
- **Project Partners, Vendors, and Contractors:** Again, more comprehensive analyses will take place when the people doing the work are involved. If partners, vendors, and contractors have been identified at this point, it would be beneficial to get their input into components such as the risk assessment.
- **Program Manager:** If the project is under the umbrella of a program, the program manager should be involved in this phase to ensure that there is consistency and clarity with all projects across the program. The program manager may also be able to provide valuable insight into risks, stakeholders, and governance structures.
- **Project Beneficiaries:** Hopefully beneficiaries have already been involved and consulted in the Identification and Definition phase. Their engagement should continue in the Setup phase and provides valuable input about the justification of the project design. However, sometimes proposal, which is written at toward the end of the Identification and Definition phase, are often done under tight time constraints providing little opportunity for consultation with beneficiaries, so it is critical to involve them at this stage.

2.2.4 What Does this Mean in Practice

Project Setup builds upon the Identification and Definition phase allowing the project team and stakeholders to prepare the project for the rest of the project. Critical elements need to be incorporated into this phase to ensure that the project has all elements in place to begin the project.

Decision Gates and Stages

Once again, decision gates play a big role in the Project Setup phase, continuously justifying that the right project is still being done in the right way. There are also going to be a multitude of decisions that the project manager will need to make about how the project will be managed and controlled, which tools and processes will be used, and whom to involve and when. Decision gates in this phase will revolve around a framework for the management of the project.

Project stages should also be considered at this point. Stage mapping and planning is an iterative, adaptive process that provides a framework for planning for the remainder of the project. During the Setup phase, the project manager needs to consider if stage planning will be used and get an initial understanding of how those stages will be implemented. With the high-level estimates in place – keeping in mind that these may need to be adapted as we move into the Planning phase – a stage map can be done, including decision gates at the end of each stage.

Government Stakeholder Involvement

At some point in Identification and Definition and Project Setup, you will likely require government approvals in some way shape or form. Frequently these stakeholders are engaged only when those approvals are required, however, if government stakeholders are involved continuously throughout the Identification and Definition and Setup phases, the project approval process may go more smoothly. Not to mention that government stakeholders often provide a different, higher-level perspective on the project that may be useful in identifying and defining the project. They may also provide feedback on how a project fits (or does not fit) into a local or national strategy and information on what has, historically, been successful with previous interventions.

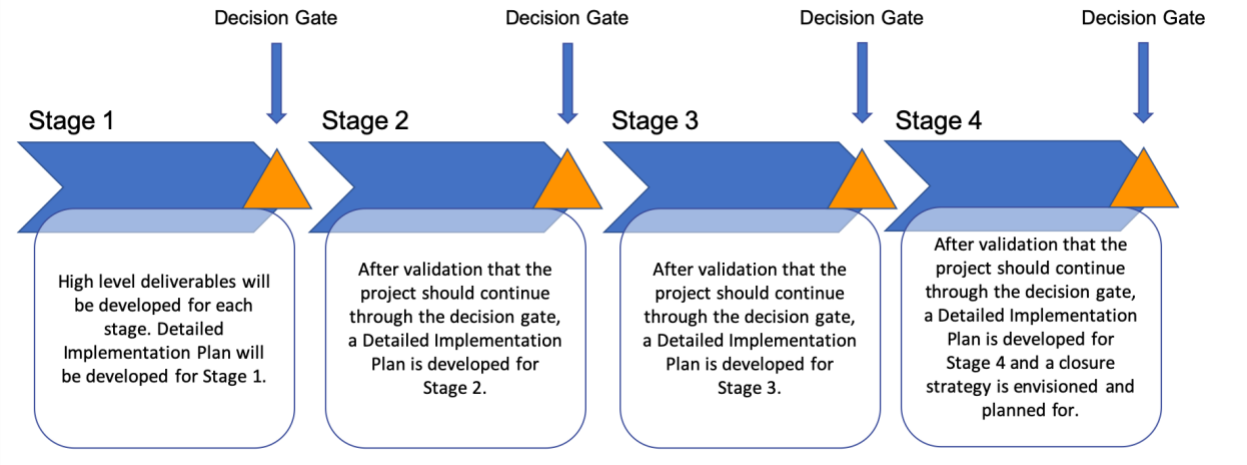


Figure 24: Project Stages

The timeframe for each stage will vary from project to project, as will the number of stages. As the project manager starts to map this process out, it would also be good to determine stakeholder involvement and engagement in each stage and in the Decision gates that follow each stage.

Internal Controls

Internal controls include the processes through which an organization's resources are directed, monitored, and measured. Internal controls play an important role in preventing and detecting fraud and protecting the organization's resources, both physical (e.g., machinery and property) and intangible (e.g., reputation or intellectual property such as trademarks). At the organizational level, internal control objectives relate to the reliability of financial reporting, timely feedback on the achievement of operational or strategic goals, and compliance with laws and regulations.

As you move through the Project Setup phase, determining and developing the processes and systems that will make up your internal control systems is critical to keeping the project free from fraud and in check as you move into planning and implementation. Working with the support teams (finance, supply chain, human resources) and Program Manager will provide a consistent control framework across projects, and it is important that these frameworks trickle down and across to any partners as well. The types and number of control mechanisms may vary according to the size, risk, and complexity of the project.

Stakeholder Engagement

Stakeholders should continue to be engaged and involved in this phase, providing essential feedback on project components such as the risk and stakeholder analysis. You will also be communicating the high-level description of the project through the Project Charter and in the project launch during this phase and ensuring that key stakeholders buy into what the project aspires to achieve and agrees upon the time, cost, and scope as outlined in the Project Charter.

2.2.5 Inputs

Building off the work done in Identification and Definition, the project team will further detail the project components during this phase. During this phase, you will probably need:

- Initial Risk Assessment
- Initial Stakeholder Assessment
- Project Concept Note and/or Proposal
- High-Level Project Team Capacity Assessment
- High-Level Resource (Human, Budget, and Supply Chain) Assessment
- Project Logical Frame

Remember that according to the Project DPro Phase Model, the phases often overlap so some of these inputs may be under development as you reach the Setup phase. That is ok! The important thing to remember is that by the time you have developed your Project Charter, you should have thought through what is required and what is not required and detailed the processes and tools as necessary.

2.2.6 Process

Risk Analysis

When exploring the "essential" elements of strong project management, most discussions quickly converge on the topic of risk.

But what is risk? The term is often used loosely, without consistency and sometimes incorrectly. In the context of the Project DPro, risk is the potential effect of uncertainty on project activities, outputs, and outcomes.

When considering the definition of risk, there are two key ideas that need to be explored further:

Probability – Risk can be seen as relating to the probability of uncertain future events (as compared to issues which deal with current ones that must be immediately addressed). Remember, as discussed in the discussion of Section 2 (Project Implementation Phase), that project issues are risks that have become a reality.

Impact – Risk has the potential to impact the project. Most project teams focus on negative risk that has the potential to harm the project (time/calendar, cost/resources, quality, scope, etc.). In general, negative risks are to be avoided. Positive risk, on the other hand, is less widely acknowledged and understood. Project teams can assume positive risks if they see a potential opportunity, along with a potential for failure. This is referred to as intelligent risk taking.

A risk event is something that may happen and could affect the project. In other words, a risk is a possibility, something that could prevent the project from achieving the outputs and outcomes within the time, budget, scope, and quality outlined.

During Identification and Definition, initial project risks were identified. During this phase, risks are further detailed and analyzed resulting in a risk management plan that will be updated and reassessed at set times throughout the project. Comprehensive risk management within a project consists of:

1. Identifying the Risks
2. Categorizing the Risks
3. Assessing the Impact and Probability of Risk
4. Developing Risk Response Strategies
5. Monitoring and Controlling Risks

In this phase, since we have already identified and categorized the risks in the Identification and Definition phase, we focus on the risk assessment and developing response strategies.

Risk Assessment

Risk assessment is the process of quantifying the risks documented in the risk identification stage. A risk assessment addresses two difficult challenges when managing project risk:

- Prioritizing Risks: Using criteria agreed upon by the project team and key stakeholders, risks are ranked according to their probability and impact.
- Identifying Risk Tolerances: Next, the project team needs to work with key stakeholders to identify their risk tolerance levels to identify which risks are acceptable, and which fall outside of acceptable tolerance levels and need to be actively managed.

A helpful tool for assessing risk is the Risk Assessment Matrix. The table below provides an example of how the matrix can be used to assess risk in a development project.

PROBABILITY risk will occur				
	High			**Risk B**
	Medium	**Risk C**		
	Low			**Risk A**
		Low	Medium	High
		Potential IMPACT on the Project		

Table 19: Risk Assessment Matrix

In the example shown on Table 19, the process of developing the Risk Assessment Matrix followed a two-step process:

Rank the Priority of Risks: The project team and stakeholders prioritized three risks by ranking their probability and potential impact on a scale of Low, Medium or High.

Identify the Risk Tolerance Line: Risks are color classified (red, orange, yellow, no color). In this example, Risk B is a clear concern and will be actively managed. Risk A is in a shaded cell (yellow) but is a lower-level concern and will only be monitored. Risk C is not in a shaded cell, so it does not exceed project risk tolerances.

In some ways, the Risk Assessment Matrix is a deceptively simple tool. While the matrix might be relatively simple, to use it productively the project team and the key stakeholders need to share a common understanding of the criteria that are used to prioritize risk and identify risk tolerance levels. To arrive at this common understanding, the project manager must work with key project stakeholders to complete the sometimes difficult process associated with answering the following questions:

- What criteria will be used to prioritize risks? Time? Scope? Cost? Other factors like value to project beneficiaries? Donor compliance regulations? Employee safety? What process will be used to identify risk tolerances?

To be able to develop a strategy for responding to a risk should, we need to understand how serious the risk will be and what kind of impact it will have on the time, budget, scope, and quality (Triple Constraint Triangle) of the project. Be specific in your risk statement and explicitly state the impact it will have on the project schedule, scope, budget, or quality. For example, in the Delta River Latrine Building project, one possible risk is: *Rain interrupts the installation of the latrines*. This statement is not specific enough, we need to indicate how the rain will impact our Triple Constraint Triangle so that we can develop a strategy accordingly. A more appropriate risk statement would be: *Rain interrupts the installation of the latrines causing a **delay in the project***.

By being specific in how the risk will affect my triangle, I can now develop a more suitable response strategy to either reduce the probability of it occurring or reduce the impact that it has if it does happen.

Risk Response

Risk identification and assessment form the basis for sound risk response options. Once a risk has been identified as being above the project risk tolerance line, the project team must identify a strategy to best respond to the risk.

Remember! The goal of risk management is NOT TO ELIMINATE ALL project risk, that is impossible. The goal is to recognize when to respond if risk exceeds the project tolerance levels. For example, "risk intolerant" projects will actively attempt to manage risks regardless of where they fall in the matrix. On the other hand, "risk-tolerant" projects might be willing to accept a great amount of risk without intervening to actively manage the situation. It is also important to note that risks change over time, so they must be actively reviewed and assessed according to their probability and impact. It is also a good idea to review the strategies and ensure they are still relevant to the context and risk.

If the project decides to actively manage a risk, response strategies include the following options (or a combination of options):

- **Risk Avoidance** – Do not do (or do in a different way) some portion of the scope that carries high-impact and/or a high probability of risk. For example, a project might choose not to work in a geographic area because there is too much insecurity.
- **Risk Transference** – Shift (or share) the risk for some aspect of the project to (or with) another party. The most common example of risk transference is insurance. For example, insurance policies transfer the risk of vehicle damage and loss to the insurance company.
- **Risk Mitigation** – Act to reduce the probability and/or impact of a potential risk. Take, for example, a project that is concerned about the risk of commodity theft.
    - The probability of potential theft can be reduced by increasing the security systems for the building (guards, new doors, barred windows).
    - The impact of potential theft can be reduced by instituting a policy whereby only the commodities required for the next seven days are safeguarded in the warehouse.
- **Risk Acceptance** – If the perceived probability and impact risk are assessed as reasonable, an organization can choose not to take action. For example, a project may acknowledge that it faces the possibility of a late rainy season onset interrupting its agricultural cycle, but the team chooses to live with the risk, and does not act to avoid, transfer, or mitigate it.

Risk Avoidance

Working in a conflict context is full of risks. Take, for example, providing interventions in a refugee camp that frequently sees violence and raids on the road from the organization's location to the camp. There is great risk to the team to travel from the organization to the camp, safety and security of team members could be jeopardized. So to avoid the risk to the project team, the activities in the camp will be managed remotely through a CBO that is based in the camp. The project team avoids this risk by conducting the activities in an alternate way.

Project Manager and Risk Response

When determining who should respond to the risk, keep in mind that the person responding to the risk will not always be the project manager. If you take a look at the risk register below, the logistics officer will be responding to the risk related to getting the supplies for building the latrines, because that is within the realm of his or her expertise. What is important is that the person who is tasked with responding to the risk has the knowledge and ability to take action and advise on the risk.

It is also important to remember that a regular risk review process must be put into place and should include as many stakeholders as possible. Including a variety of stakeholders, including any partners, in the discussion and analysis of the risk may lead to additional risks being identified that the project team didn't think of.

It is important to note that "ignoring" a risk is not an acceptable risk response strategy. Risks must not go unrecognized, mismanaged, or ignored. Even in situations where a risk is accepted, it is not being ignored, but rather is being continuously monitored. In these cases, the decision to accept the risk is based on a rational process of risk identification, assessment and response, with the outcome resulting in a decision to accept the risk.

At this point, the project team will need to formulate a plan of action for the risk response activities it has selected. The risk management document will need to accomplish the following:

- Develop an organized and comprehensive risk management plan;
- Determine the methods to be used to implement the risk responses;
- Plan for adequate resources for risk response.

Every risk management plan should be documented, but the level of detail will vary depending on the project. Large projects or projects with high levels of uncertainty will benefit from detailed and formal risk management plans that record all aspects of risk identification, risk assessment and risk response.

For more complex projects and projects with more uncertainties, a risk register provides a more formal and more detailed identification of risks and the response plan for addressing them. A risk register also contains information about the magnitude of probability and impact of the risk. It may also include proposed risk response strategies and "risk response owners" of the risk. Risk response owners will be the focal point for coordinating or taking action if that risk becomes an issue. The risk register can also include information about the cost and schedule impacts of these risks.

While the format of the risk register can vary by organization or by the project, an example of one format would include the information below. Be sure to include, at minimum, the risk, status, probability and impact, response strategy, and risk response owner in your risk registers. It is important to start this process in detail during the Setup phase so that the risk management plan can be incorporated into the project plan.

Risk Name	Probability	Impact	Risk Score	Response Strategy	Responsible
Partner lacks capacity to implement activities causing a delay in stage 2 activities.	6/10	5/10	30	Mitigate – Include a budget for building the capacity of the partner.	Project Manager
Rain causes a delay in the installation of the latrines.	6/10	6/10	36	Avoid – Planning of the latrine building and installation should be delayed until after the rainy season.	Project manager
Insecurity threatens deliveries of the materials required to build the latrines, delaying the project or requiring procurement from the local market which may compromise the quality.	4/10	6/10	24	Transfer – Contract transporters to ensure the timely deliver and insurance of the materials.	Logistics Officer
Turnover in the local government compromises the ability to implement activities because new approvals will be needed.	2/10	8/10	16	Accept – Monitor and reassess risk.	Government Liaison

Table 20: Risk Register – Delta River Latrine Project

Risk Monitoring and Control Strategy

As the project evolves, some risks will be resolved or diminished, while others may surface and thus be added. It is important, however, to continually revisit the question of risk from the earliest stages of the project through the entire implementation phase. That being said, it is beneficial – at this point – to establish specific points in the project in which risks will be revisited and reanalyzed. We will discuss risk monitoring and control during the Implementation Phase, but to ensure that risk remains a "living" process, the project manager should identify the when, how, and with whom the risks will be updated throughout the project.

Stakeholder Engagement

Stakeholders are critically important to the success of any project, whether that be a humanitarian food distribution project or a development, livelihood project. Engaging the right stakeholders at the right time is the responsibility of the project manager. However, this is not something that can be done ad hoc. The project manager should understand and act on ensuring stakeholders are engaged in project activities.

Establishing a stakeholder engagement strategy during the Setup phase provides the project manager with clarity on how stakeholders will be involved in various project activities and what their involvement and engagement will be. Doing this in the Setup phase will ensure participation and the engagement of stakeholders during subsequent phases.

Stakeholder	Role in Activity	Interest in Activity	Engagement	Follow-up
Who is the stakeholder?	What will they do in this activity?	What is their interest in participating in this activity?	How will we engage them to ensure their participation?	What kind of feedback and follow-up is required?
Local Municipality Official	Provide an opening speech for the project launch.	Participation will provide exposure for the municipality and official and demonstrate that they are interested in providing support for projects that will help the community.	Coordinate and communicate about the project purpose through an official letter followed by a meeting to request buy-in and participation in the launch.	Send an official thank you letter and include their role in the activity in the official press release. Have a follow-up meeting with official(s) to answer any questions and request their engagement in future activities.

Table 21: Stakeholder Engagement Strategy

Engaging stakeholders is not an exact science, there will be changes and adjustments that need to be made. Following up with stakeholders is critical to ensuring their participation.

Project Governance Structure

In the context of project management, governance defines the management framework within which project decisions are made. A robust governance structure clarifies:

Authority: Who has the power to make decisions within tolerance levels.

Accountability: Who is accountable for the success of the project? With no clear accountability for project success, there is no one moving agendas to resolve project issues.

Project Changes: Decisions on changes that extend beyond the project manager's agreed tolerances.

Oversight: Oversees the direction of the project, provides insight, and monitors the viability and validity of the project, making decision to terminate the project if necessary. Also ensure that different stakeholder perspectives are heard.

Supports and Advocates: Provides support and resources for the project as well as advises the project manager on the management aspects of the project, especially those that are beyond the control of the project manager.

Governance structures can take many forms, most frequently as project sponsors, boards, or steering committees. The simplest and most common governance structure in projects is comprised of a single individual – the Project Sponsor – might be sufficient. This may be represented as a program manager, line manager, or INGO partner focal point, for example. Regardless of the title of the individual, what is

important is to determine who the project manager can go to when decisions are above his or her tolerance levels and to whom he or she can turn to for support.

While a governance structure comprised of a single sponsor might be simple, it often fails to represent the multiple perspectives of development projects.

We all know that development and humanitarian projects are seldom simple. The project team must manage agendas with multiple stakeholders, including (but not limited to) the project donor, the implementing organization(s), the beneficiary communities, and project suppliers. In these complex contexts, a single project sponsor will not provide the support the project team requires to succeed. Instead, a more effective governance structure would be a project board or a steering committee, which includes representatives from multiple stakeholders involved in the project.

Reality Check-Project Governance

When developing your governance structure, you must determine which structure is most appropriate for your project, given the context you are working in and the resources you have. While steering committees and project boards provide a more robust governance framework, they simply may not be practical for your project. The important thing to remember is that there needs to be a framework in place, even if it is a project sponsor with clearly outlined tolerances.

Something else to keep in mind is that there may be several layers of governance, particularly if you are an implementing partner. The following scenario more clearly outlines this:

You are a project manager for a local NGO, working under a program run by an INGO. You coordinate with the program manager for program-related issues and with the finance focal point for finance-related issues. There may even be another focal point in the MEAL department for monitoring and evaluation-related issues. This can create chaos and confusion for the project manager. In this kind of scenario, it is especially important to understand who to go to and when. Ideally, there would be one focal point that serves as your project sponsor, but this may not be the case.

Regardless of scenario, you – as the project manager – are responsible for ensuring that you are aware of your tolerances and governance structure and that it is documented in the Project Charter.

Reality Check – Project Governance and Humanitarian Projects

Humanitarian projects often require rapid identification and deployment to meet the immediate needs of beneficiaries. They also usually require continuous adaptation as contexts and needs change. Establishing a governance structure within humanitarian projects that is commonly understood and clear facilitates the ability for project teams to adapt, better ensures that issues are overcome more quickly, and helps to avoid delays.

There is no single, definitive norm for establishing project boards or steering committees, it will depend on the organization, size of the project, and stakeholders involved. However, the following guidance provides insights into how they can be structured and managed:

Size

There is no standard size for project boards. At minimum, there should be two people and it is common to find boards comprised of three, four or five representatives. As mentioned previously, smaller group size facilitates efficient collaboration and decision-making. However, it is often helpful to expand the size of the Board when stakeholder management is complex. For example, if there are multiple donors, multiple beneficiary groups, or multiple organizations working on the same project.

Composition

Board members should represent a variety of stakeholder perspectives and can vary depending on the project. The key is to gather a group of dedicated representatives of stakeholder groups who will provide a more holistic environment for decision-making. There isn't one right makeup of a board, but some examples could include:

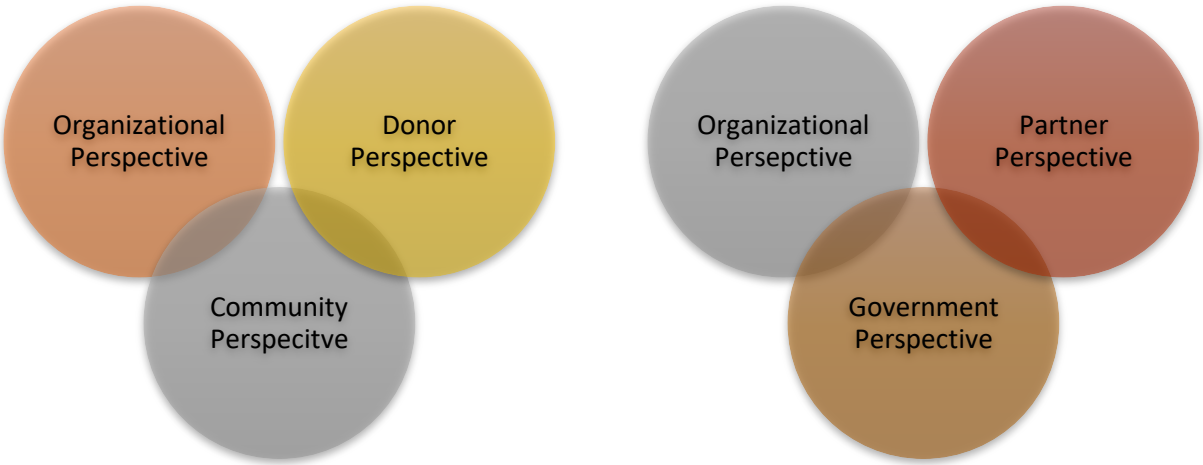


Figure 25: Board Composition Examples

Each board/steering committee member perspective reflects a different dimension of the project in terms of resources provided to the project; understanding of organizational, users, and developer needs (for decision-making on ongoing project viability); and weighing project results. Each has its own assessment of what "success" means – and all perspectives when taken together define project success.

Responsibilities

Collectively, the Project Board/steering committee owns the project and its responsibilities include:

- Decide on proposed project changes (scope, budget, calendar or others) that extend beyond the project manager's agreed tolerances;
- Oversee the project, providing resources, direction and insight as necessary;
- Monitor the ongoing viability of the project, making decisions to terminate the project if necessary;

- Represent the interest of the perspective they represent;
- Support and advise the project manager on the management of the project, especially on issues that extend beyond the span of control of a project manager; and
- Advocate for necessary support and resources for the project.

Meetings It is recommended that Project Boards conduct regularly scheduled meetings where the agenda is set by the project manager in cooperation with the Executive Perspective representative. Important items on the agenda include the review of the Risks Log and Issue Log to be discussed later. In addition, a Project Board meeting is also necessary at all decision gates.

One area of confusion that sometimes arises is whether the Project Board or Steering Committee acts as a simple democratic entity wherein each board member has an equal voice when voting on major decisions. It is important to recognize that not all voices on the project board will hold equal authority on all decisions. If, for example, there is a need to request a budget increase or a calendar extension for the project, it could be that all members of the Project Board are consulted but ultimate authority for the decision resides exclusively with a single board member (most likely in this example, the donor perspective) or a small group of board members. Remember that the decision-making effectiveness of a group can be thought of as being inversely proportional to its size. Not only can large groups fail to make timely decisions, the quality of decisions can be impacted by the challenges of managing the group.

Governance Structures and Implementing Partners

As is often the case, many projects are executed by implementing partners under the umbrella of a program managed by an International NGO. In this case, the governance structure would likely be linked to the structure within the INGO. Project managers would have clear tolerances and above those tolerances, would report directly to the focal point in the INGO. Rarely will implementing partners have a direct line to the donor or high-level management within the INGO.

In this case, authority levels – or tolerances – become incredibly important because there is an additional layer of governance in which to escalate the decision-making process.

Another component of establishing a governance structure is to ensure that tolerance levels of the project manager are clearly outlined and articulated in the Project Charter. These tolerances allow the project manager a framework for determining to what extent he or she can make decisions regarding a project and at what point the decision-making needs to be escalated to the governance structure. Some examples of tolerances that should be set in this phase are:

Time Tolerance – the amount of time by which the project completion can be later or earlier than the planned date.

Cost Tolerance – the percentage, or a cash amount, by which the project can be over or under the planned budget.

Scope Tolerance – is measured as an agreed variation from the product scope, and any potential variation should be documented in the product description.

Risk Tolerance – provides a benchmark for which risks you should be escalating to the Project Board.

Quality Tolerance – ranges that define acceptable performance for a product, documented in the product descriptions.

Benefits Tolerance – ranges of acceptable performance of the project at the outcomes level.

These tolerance levels become important during implementation when issues and changes are likely to take place in the project. You don't want to be put in a situation in which you don't know if you are permitted to make a decision or to whom you need to escalate that decision-making to. Establishing the governance structure before the planning and implementation begin will provide clarity to the project manager and facilitate and expedite decision-making processes throughout the project.

Risks and Tolerances Example

You are a project manager with the tolerances to make changes to a project regarding the time, budget, and scope, as long as the change does not exceed more than 5% of any budget line. The MEAL team has alerted you to two issues through their monitoring of activities taking place in the Setup phase. The first issue is that number of people in need has increased as more IDPs (Internally Displaced Persons) have moved into the Delta River area. Your original target was to serve 2,500 direct beneficiaries. With the influx of IDPs, the number of direct beneficiaries in need of WASH facilities is now 3,250, which will require an additional 20 latrines. This increases the budget dedicated to this activity by 12%. This is above your tolerances as a project manager and will require that you escalate this issue to the next level in your governance structure.

The second issue is that the cost of one of the latrine components has increased 2% from the original price quoted. This issue is within your tolerances as a project manager, so you have the ability to make a decision regarding this issue. Keep in mind that you should document this change and make sure that the fluctuation in the price is communicated to relevant stakeholders.

Planning Framework

How will you approach the planning process for the project? Who will be involved? What tools will be used? At this stage in the project, it is important to planning framework for the project. In essence, you are planning for the plan.

Some things to keep in mind as you determine the framework for the project are:

- **Project Length:** If you are implementing a particularly long project that takes place over the course of a year or longer, you may want to consider using a stage planning process. Stage planning can also be useful for projects operating in complex and conflict environments. The example in Figure 26 is a stage map for the Delta River Latrine Project, which includes all project elements.

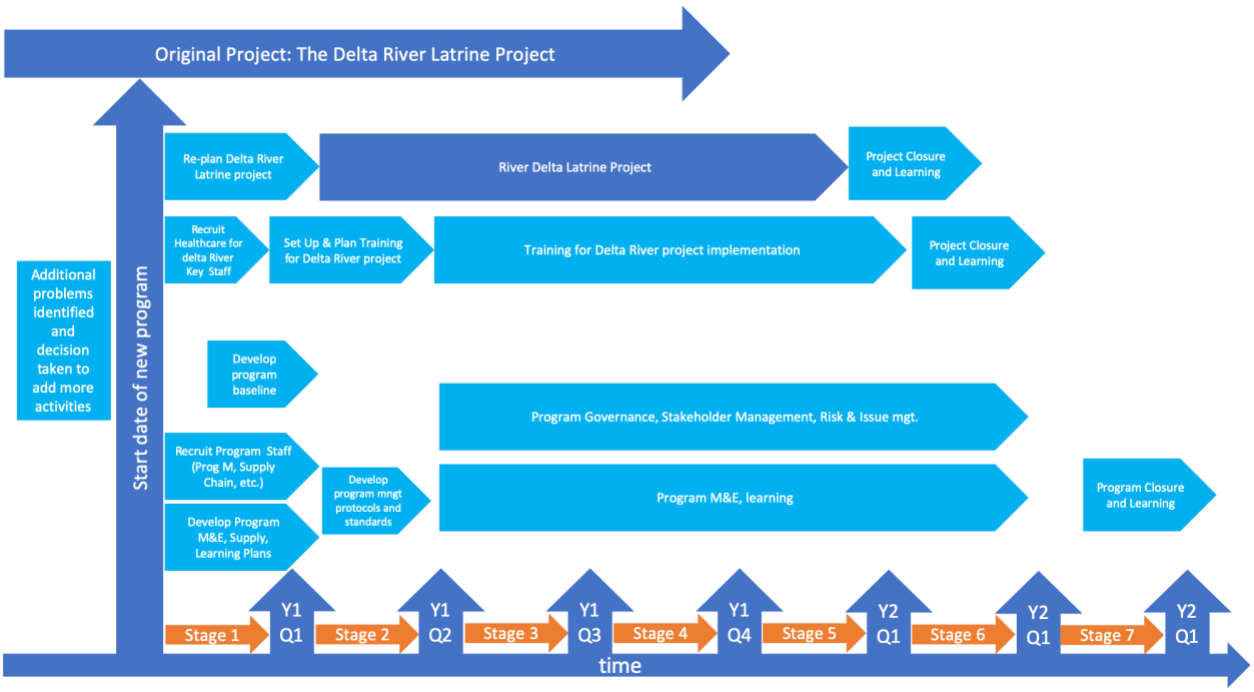


Figure 26: Stage map for the Delta River Latrine Project

If implementing shorter term, less complex projects, ensuring that Decision gates are included as formal checkpoints to continuously validate the project is critical for the project justification.

- **Tools and Processes:** Do you know which tools you will use to manage the project? More importantly, is the project team trained and aware of the tools, their functions, and the points in the project in which these tools need to be reviewed and updated?
- **Cross-Cutting Components:** These components have become quite common in projects and the process of including these components begins early in the project. Some examples of these cross-cutting components can include but are not limited to:
    - **Gender:** Whether gender-mainstreaming or using gender-responsive indicators, this cross-cutting theme is frequently required by donor and partner organizations to ensure that there is gender balance and equity considered within the intervention. An example from the Delta River Latrine Project could be ensuring that there are separate latrine areas/facilities for men and women and targeting an equal number (50%/50%) of men and women as direct beneficiaries.
    - **Protection:** Mainstreaming protection in your project design ensures that you have accounted for the most vulnerable people and that the project is not causing any harm to the community and targeted beneficiaries. This may mean that you have incorporated mechanisms for reporting protection-related violations and that you have designed your project based upon ensuring that the needs and conditions of the most vulnerable are incorporated into project activities. An example from our Delta River Latrine project is to ensure that women's latrines are less than 50 meters from their housing units and maybe even constructing a secondary barrier around the latrine facilities to provide an extra layer of privacy and protection.

- **Ability (Disability):** Ensuring access to the intervention/products/services for those who are differently abled (disabled) is part of serving an entire community and ensures equitable access to all products and services. An example from our Delta River Latrine project is to ensure that the latrines are wheelchair accessible through the installation of ramps and bars in the latrine and wash basins that are at an appropriate height for those using wheelchairs.

MEAL Framework

Monitoring should take place throughout the entire life of the project, providing essential feedback for the project manager and team about the project – Is it on time? Scope? Quality? Furthermore, the project manager should work closely with stakeholders to determine if and when evaluations should take place. Often times, this process takes place too late in the project, causing unnecessary constraints and compromising the quality. Developing a framework for monitoring and evaluation early is crucial for ensuring that there is a clear direction when the project planning takes place. It also sets the stage for accurately estimating what kind of resources (human, monetary, and technological) will be required to effectively implement these tasks.

Framework for Monitoring

You should be able to develop a framework for your monitoring based upon the information in the logical frame – essentially your indicators will guide the monitoring of your project. Other things to consider are the frequencies in which the monitoring will be done, the capacity of the team doing the monitoring, and the tools (surveys, FGD, etc.) that will be used to collect the data.

Framework for Evaluation

Evaluations can be costly and require substantial time and resources. At this point in the project, it is beneficial to outline what kind of evaluations (real time, final, ex-post) you anticipate for the project. Keep in mind that the ex-post evaluation requires a lot of work before and during the implementation of the project and can be quite costly and resource heavy.

Check with your organization, partners, and donors on the expectations for conducting evaluations for the project and determine if the evaluation will be conducted by someone within the organization or if an external consultant will be required.

Framework for Accountability and Learning

Accountability and learning are often incorporated into the monitoring and evaluation through the MEAL methodology. If you are including accountability and learning, it is at this point that you should begin to consider what kind of accountability mechanisms you will be using and how those mechanisms will feed into the continuous learning in the project. If using accountability and learning, get project team members together and begin to think through the following questions:

- What kind of accountability mechanisms will be used and with whom?
- How will feedback from the accountability mechanisms be translated into lessons learned?
- How will lessons learned be incorporated into the iterative planning process of the project?
- Who will be responsible for overseeing this process?
- How will the learning be filtered up to the program and portfolio levels within the organization?

Information and Knowledge Management

Information is only as good as you use it and, sometimes, we lose a lot of data and information throughout the life of a project simply because there is no information and knowledge management plan in place. What is knowledge management? It is the ability to develop, share, and use the information obtained in the project. What is information management? It is how the data is preserved and the processes in place to ensure that all of the information of the project gets labeled and stored in a way that it can contribute to the institutional knowledge and be used in the future.

To develop an information management plan, you will need to consider the following:

- How and where will information and data be stored?
- What kind of file naming conventions will be used, including version control?
- What kind of security apparatus is required to ensure that the information – especially confidential information – is kept secure.
- Who will oversee the management of the information?

To develop a knowledge management plan, you will need to consider the following:

- How will the knowledge be incorporated into project and program design, planning, and implementation?
- How will lessons learned be captured throughout the project to be used to inform changes and adaptations to the project?
- How can the knowledge be used for other projects, programs, and the portfolio of the organization?

Putting this plan and standards in place early will ensure that you capture all the data and information in an organized way, starting from the beginning of the project and uses that information in a structured way. The project manager will need to work with the MEAL team to ensure that all components are covered and that the plan is consistent with organizational processes and aligns with program requirements, if applicable.

Project Charter

If a project has been following the decision gate model, a number of go/no-go decisions already have been made before entering the Setup phase. During the Setup phase, it is important to ensure that the project is formally authorized by the project governing body (whether it is comprised of a project sponsor or a project board/steering committee).

This approval should be documented through the development of a project charter, a document that provides a high-level description of the project and which is signed by the project governing body. The contents of the project charter can vary, but usually includes statements regarding the:

- **Project Purpose** – including a statement of the need the project will address.
- **Project Deliverables** – articulating the scope, including the project goal, outcomes, and major outputs.
- **High-level Project Estimates** – including a high-level statement of:
    - The project activities;
    - The project schedule;
    - The project budget; and

- A preliminary list of the roles and skills required to perform the necessary work.

- **Project Risks** – identifying potential problems/risks that the project might encounter.
- **Project Tolerances** – articulating project tolerances regarding project deliverables, schedule, cost and risk.
- **Project Change Control** – establishing an exception handling process for when the project exceeds a tolerance in any of these areas.

Once developed and signed, it is important that it not be put aside and forgotten. The project charter is an extremely useful document that can be used to accomplish many objectives. Think of it as a compass that shows us which way is north. Essentially, the project charter aims:

- To officially authorize the start of project activities and the use of resources for project implementation;
- To ensure that there is shared understanding of the project parameters among key project stakeholders and sponsors (both internally and externally);
- To document a shared commitment to the objectives of the project and the resources/activities required for project success.

Furthermore, the project charter should be considered a living document. If the project governing body approves major changes to the project (scope, budget, calendar or otherwise), the project charter should be updated and signed to reflect the new project parameters.

In summary, the project charter serves as the project manager's ally, and in the absence of a project charter document, the project team runs the risk that:

- The project team will begin to expend time, money, materials, staff and organizational capital in executing a project that lacks commitment and support from key decision makers (donors, implementing partners, decision-makers internal to the agency);
- Key stakeholders do not share a common understanding of the project (scope, budget, schedule, benefits, and risks).

Project Launch

One of the main objectives of the Setup phase is to communicate the launch of project activities to the stakeholders who have interest in the intervention. These stakeholders might include the beneficiary communities, NGOs working in the intervention area, representatives of government ministries, the general public, and many more.

There are several communication tools that can be used to announce the project launch to the community of stakeholders. However, regardless of the communication method, the purpose of the project launch is to:

- To formally acknowledge the beginning of the project;
- To ensure that key stakeholders have a consistent understanding of the project;
- To introduce stakeholders to the project.

In many ways, the signed project charter is an ideal document, in which to officially communicate the launch of the project to the broad project audience. Because of its brief, concise format, the project charter is especially good for communicating the high-level parameters of the project. As a result, this

document will frequently be very handy when dealing with some people who have short memories, unintentionally or otherwise. Sharing the project charter with the larger community of stakeholders is not only an effective communication practice, but is also a way to promote transparency and accountability in the project.

If, however, there are reasons that the project team prefers not to share all elements of the project charter with the larger community of stakeholders, other options for communication mechanisms exist. If there is sensitive information, it can be included in an amended version of the project charter that can be shared with the general public. Furthermore, articles in newspapers, press conferences, field visits, meetings, and launch party events can also be used to communicate with the larger community. The messages for these communications can vary, depending on the audience and their connection to the project. It is important, however, that at least the high-level parameters of the project are shared with stakeholders before project implementation begins.

Reflections on Project Setup – Are we ready?

A lot of time and effort is put in before the planning of the project can begin. The essential question you need to ask at this point is, "are we ready to start planning?" Much like in the Identification and Definition phase, there are often constraints during Setup that make it challenging to prioritize things like a comprehensive risk analysis or a clearly articulated governance structure. However, despite the constraints, the tools and processes done in the Setup phase are imperative to planning. For example, knowing the risks of the project will help to identify where bottlenecks may occur in your project schedule or with specific activities. Governance will help facilitate any decision-making, which is why it should be clear before any planning begins. Having high-level estimates on scope, budget, human resources, etc will make the planning process for clear and efficient. So, as you move through this phase, make sure you have dedicated enough time and resources to complete these processes.

Also consider who needs to be involved in this phase and how. Ensure that the right stakeholders are at the table to improve the outputs of the Setup phase.

2.3 Project Planning

What We Cover in this Chapter:

- ✓ Schedule Planning
- ✓ MEAL Planning
- ✓ Communication and Stakeholder Engagement Plans
- ✓ Supply Chain Planning
- ✓ Internal Controls
- ✓ Human Resource Planning
- ✓ Sustainability Planning
- ✓ Closure Planning

> "If you don't know where you are going. How can you expect to get there?"
>
> – Basil S. Walsh

2.3.1 Introduction

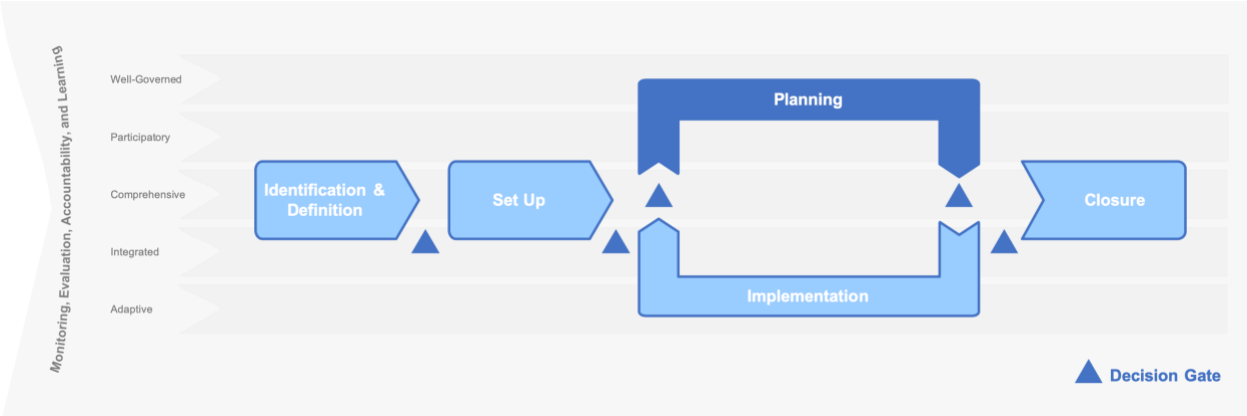


Figure 27: Project DPro Phase Model – Planning

By the time a project officially enters the Planning phase, the project team has already developed a number of documents from the Identification and Definition and Setup phases (i.e., the project logical framework, the project proposal, the project charter, etc.) that contain an extensive level of detail related to the project.

It is important not to confuse the project proposal, the project logical framework, or other documents developed during these phases with a project plan. An implementation plan will differ significantly from these other documents in terms of the format, purpose, audience, level of detail, participation, timing, and schedule constraints.

While some argue that the project logical framework and/or the project proposals provide an acceptable amount of information to serve as a project plan, these documents rarely provide enough detail to implement a project. This is because those documents are written to serve different purposes altogether.

Take, for example, the project proposal in comparison with the project implementation plan. Table 22 outlines differences between the two documents in terms of their purpose, format, and level of detail (note that a similar comparison could be made between the project logical framework and the project implementation plan).

	Project Proposal	Project Implementation Plan
Purpose	To obtain approval and funding for the project, emphasizing clear, concise communication of ideas that 'sell' the project to funding stakeholders.	To ensure that the project arrives on time, on scope and on budget, and according to established quality parameters; to emphasize comprehensive, logical planning and to model the project for review by the project team and other stakeholders
Format	Format is often determined by donor requirements or agency stakeholders responsible for investment decisions	Format is determined by the project team and key stakeholders
Level of Detail	Often limited in the level of detail – due to the purpose, format, anticipation, schedule and timing of proposal	Level of detail is developed by the project team and key stakeholders.
Participation	Often written by a small team as a result of time constraints that limit participation	Opportunity exists to expand participation to include an array of stakeholders, including experts and technical advisors
Audience	Focused on donors and stakeholders who distribute resources	Focused on the needs of the team implementing project activities
Timing and Schedule	Often written under tight time constraints, sometimes months (or even years) prior to implementation	The opportunity exists to revisit proposals to further develop/revise/update plans at the beginning of project implementation or at key benchmarks in the life cycle.

Table 22: Differences between Project Proposal and Project Implementation Plan

Nevertheless, while there are considerable differences between the purpose, process, and content of a project proposal and a project implementation plan, many development organizations use the project proposal as an implementation plan. This is especially the case where the proposal format is based on donor-driven requirements that result in proposals that approximate to project plans in terms of length and level of detail. Beware – even the most expansive project proposals (and many can exceed 100 pages in length) still have weaknesses that limit their effectiveness in planning for project implementation.

A comprehensive and integrated project plan will consider several different aspects. Depending on the complexity of the project, there may be more focus on some aspects than others and it will be up to the project manager and stakeholders to determine what is the most appropriate for the project given the context, complexity, stakeholders involved, and the environment the project will be operating in.

Using the Proposal as a Plan

While the project manager may be tempted to think that the documents developed during the Identification and Definition and Setup phases (logical framework, project proposal, etc.) are sufficient to define the scope of the project, this is seldom the case!

Remember, the logical framework and the project proposal were written for very distinct purposes. While they are especially strong at outlining the high-level logic of the project and selling the project to donors, they are not designed to guide a team in the implementation of the project.

Before the actual work of the project begins, the project manager needs to confirm that the scope of the project is comprehensive and detailed. Special care should be taken to ensure that information about the indirect work of the project is included in the scope, for example, details related to procurement, coordination, communications, human resources and risk management.

2.3.2 Key Output

Implementation Plan

As previously mentioned, the implementation plan is intended to guide the project team through the implementation of activities to achieve the outputs, outcomes, and contribute to the goal. Whether you call this the detailed implementation plan (DIP), the project implementation plan (PIP), or something else, the purpose is the same.

The format of implementation plans will vary depending on the organizational and donor requirements as well as the nature and complexity of the project. In some cases, the elements of a comprehensive plan are included in a single project implementation plan document. In other cases, the project implementation plan is made up of multiple documents. For example, a project might have both a core implementation plan AND a specific plan for MEAL. Also, depending on the size, complexity and risk of a project, a team might choose to have separate documents that specifically address project supply chain, project communications, project human resources management, etc. Each of these plans should be consistent with (and linked to) the other documents that make up the comprehensive project implementation plan.

The purpose of the implementation plan is to provide a model of the project that clearly outlines what will take place, when and by whom within the time, cost, and scope of intervention. An implementation plan could include the following:

- **Schedule Plan:** This plan consists of a series of steps and tools that are used to develop a comprehensive and accurate project schedule plan. Included in this plan is the scope of work, timeframe for the project, and budget.
- **Risk Plan:** This plan was first developed in the Setup phase, during planning, you will further detail and revisit the risks, ensuring that response strategies and owners are in place and still relevant.

- **MEAL Plan:** In collaboration with the schedule plan, the MEAL plan should be finalized during this phase, done in coordination with the MEAL department or counterpoint.
- **Communication and Stakeholder Engagement Plans**: Taking the stakeholder engagement strategy from the Setup phase, the project team will develop plans for the engagement of stakeholders as well as communication during this phase.
- **RACI Chart:** The RACI (Responsible, Accountable, Consulted, Informed) is a tool that outlines roles and responsibilities for activities and tasks.
- **Supply Chain Plan:** Building on the high-level estimates done in previous phases, this plan will outline in detail all the assets, procurement, and logistical components of the project.
- **Human Resource Plan:** Also building upon the high-level analysis done in previous phases, the human resource plan will expand on precisely who will be required (and with what expertise) and when as well as a plan for managing people during the remainder of the project.

2.3.3 Who is Involved in this Phase

Participation and participatory processes are encouraged and prioritized during each phase of the project life cycle in the development sector. This is especially true for the planning process. Involving the right stakeholders at the right time in the planning process will provide you with more accurate estimates of the resources, budget, and time required to complete your activities and achieve your outputs.

You should also consider including other project stakeholders (supply chain, security, human resources, finance, and MEAL) into the planning process. The program manager could also be a valuable resource, providing valuable guidance from a different perspective.

How many times have you experienced delays in projects due to the recruitment of project team members, or perhaps the procurement of needed materials? These delays and risks can be reduced if the planning process involves all members of the project team and appropriate stakeholders, depending upon their influence on the project and its outcomes. Participation in the planning process has many advantages including:

1. Stakeholders have skills and knowledge that can be leveraged when developing accurate estimates regarding budgets, time requirements, levels of effort, and other resources required for completing the work of the project.
2. Project stakeholders are often in the best position to identify potential project risks and make plans to mitigate their impact.
3. New staff and/or partner staff can benefit from improved project orientation when they participate in planning activities. These activities help ensure a common understanding of the outcomes, outputs and of the project.

Another advantage to using a participatory approach to project planning is that stakeholders who are involved in the project planning process are more likely to assume leadership, ownership and buy-in of project implementation activities. While at the same time, stakeholders who oppose the project can be brought round by the project team by listening to their concerns and reshaping the scope (or other elements of the project) to help overcome their concerns.

2.3.4 What Does this Mean in Practice

In this phase, you will need inputs from the Identification and Definition and Setup phases which will feed into the planning processes and produce the final output: Implementation Plan. There are additional elements required to make this process as effective as possible and ensure that you are still doing the right project in the right way.

Accountability

- **Transparency:** Establishing systems and procedures in which information about the project is accessible and available to stakeholders is the essence of accountability. This may manifest in the form of reports, documents, meetings, complaint mechanisms, or the involvement of stakeholders in the project management processes.
- **Data and Information Protection:** The secure storage of data and information is also linked to accountability. Part of the concept of "do no harm" is to ensure that the project intervention does not cause any adverse effects to the community and beneficiaries. The secure storage of data and information is paramount to ensuring that no information about beneficiaries gets into the wrong hands.
- **Stakeholder Participation**: Ensuring the right stakeholders are involved at the right time, with mechanisms in place to get their feedback is important.
- **Cross-Cutting Themes Accountability:** Gender, protection, dealing with vulnerable populations, people of all abilities, all of these cross-cutting themes are being mainstreamed in projects. The importance of incorporating these themes into your projects is high. Sometimes, donors require that you include these themes into the indicators or design of your project. Whether or not required, these cross-cutting themes should be considered. Inclusion of all populations, regardless of their gender, ability, socio-economic status should be examined and measures should be taken to ensure that these themes are integrated into as many aspects of the project as possible.

Control Mechanisms

The nature of the development and humanitarian sectors implies that we want to provide stakeholders with the highest quality products and services as possible. However, the question we need to ask ourselves is, *do we have the quality and internal control mechanisms in place to measure and ensure that we are delivering the highest quality products and services possible*?

So, what is required to ensure that you are maintaining a high quality of your deliverables, services, and products? Several elements work together including:

- **Internal Controls:** Establishing internal controls promotes the responsible use of resources and protects against fraudulent activities. Fraud harms all aspects of the project, from the ability of the project team to complete all activities to the misuse of funds. While internal controls will not completely prevent these situations from happening, they will reduce their probability. Being accountable for the resources and processes within the project is part of the oversight of the project manager.
- **Change Control:** It is almost certain that there will be some changes made to a project. Ensuring that only necessary and authorized changes are made is the essence of change control. A process should be set up during the planning phase that outlines the steps that need to be taken

to manage any changes in the project, including tolerances for the project manager and which changes should be escalated to the project governance.

- **Quality Control:** Linked directly with the return on investment, providing the highest quality product, services, and project is part of upward, downward, and horizontal accountability. We want to provide donors and partners with the best product and services possible with the funds provided. We also want to make sure that the community and beneficiaries achieve the highest benefit out of the intervention. Finally, we should also ensure that our intervention aligns with sector priorities and objectives so that all organizations and projects operating in the sector contribute to that higher goal with clarity on how the quality will be determined and measured.

As you move through the planning process, make sure that you consider these elements into the process. Do new mechanisms need to be put in place? Is our monitoring plan comprehensive and does it reflect the reality on the ground and with our team?

Rolling-Wave Planning

Over time, changes to the project implementation plan help provide greater detail on schedule, costs, and resources required to meet the defined project scope. This iterative process of providing increasing levels of detail to the project implementation plan over time is often called 'rolling-wave planning.' Iteration, by definition, is the act of repeating a task a second, third or more times to achieve a desired result.

Rolling-wave planning can be especially helpful in situations where project information is difficult to collect or is changing very rapidly (for example, operating in high risk or emergency contexts). In these situations, as new project information is collected, additional dependencies, requirements, risks, opportunities, assumptions, and constraints will be identified. Significant changes in any of these areas occurring throughout the project life cycle may trigger the need to change one or more elements of the implementation plan.

Rolling wave planning, however, is not limited exclusively to humanitarian contexts. This method can be employed by virtually all other kinds of projects as well.

By adopting an iterative project planning approach, organizations have more flexibility to accommodate change. The project team is able to revisit the project implementation plan at the beginning of each project period to:

1. Confirm the logic, risks, opportunities, assumptions and constraints.
2. Update and revise the activities, timelines and resources of the project.
3. Ensure that the project intervention activities are focused on addressing the risks and issues that pose the most immediate threats to project success.

Decision Gate Process and Plan

Decision gates play an important role in the planning process. Establishing a routine for continuously reviewing the project will help to ensure that you are doing the right project in the right way. The other thing to consider about decision gates is how you will incorporate them during the implementation.

Implementation tends to be a very busy time for the project manager and team. In fact, a majority of the time, energy, and resources of the project will be spent during implementation. Establishing a process for revisiting and justifying the progression of the project should be developed during the Planning phase. Keep in mind that there may be emergency decision gates that pop up when context or

any major changes take place within the internal or external environment that the project is operating in.

If you are using stage planning, a decision gate will fall at the end of each stage, providing the opportunity to revisit the implementation plan, adding more detail to the Work Breakdown Structure (project scope) for the upcoming stage. There may also be a decision gate within each of the stages that provide the project team and stakeholders with the opportunity to revisit the justification and validity of the project.

2.3.5 Inputs

When developing your Implementation Plan, you will use the documents developed during the Identification and Definition and Setup phases as a launching point for your plan. Those inputs may include:

- Logical Framework
- Project Proposal
- Project Charter
- Comprehensive Risk Register
- Stakeholder Analysis and Engagement Strategy
- Stage Map

2.3.6 Processes

Your Implementation Plan will be the result of a variety of processes and analyses, providing a balanced and comprehensive picture of how the project will be implemented. The planning process is best served if it is done in a participatory manner, including as many relevant stakeholders in the process as possible.

Schedule Planning

Schedule planning is directly related to the triple constraint triangle, consisting of the scope of work, timeline, and resources (including budget, human, and other) required to bring about the desired project outputs and outcomes. A 5-step process is used for schedule planning that provides the opportunity for the project manager, team, and stakeholders involved in the planning process to examine the different components that will make up the schedule, in a structured way.

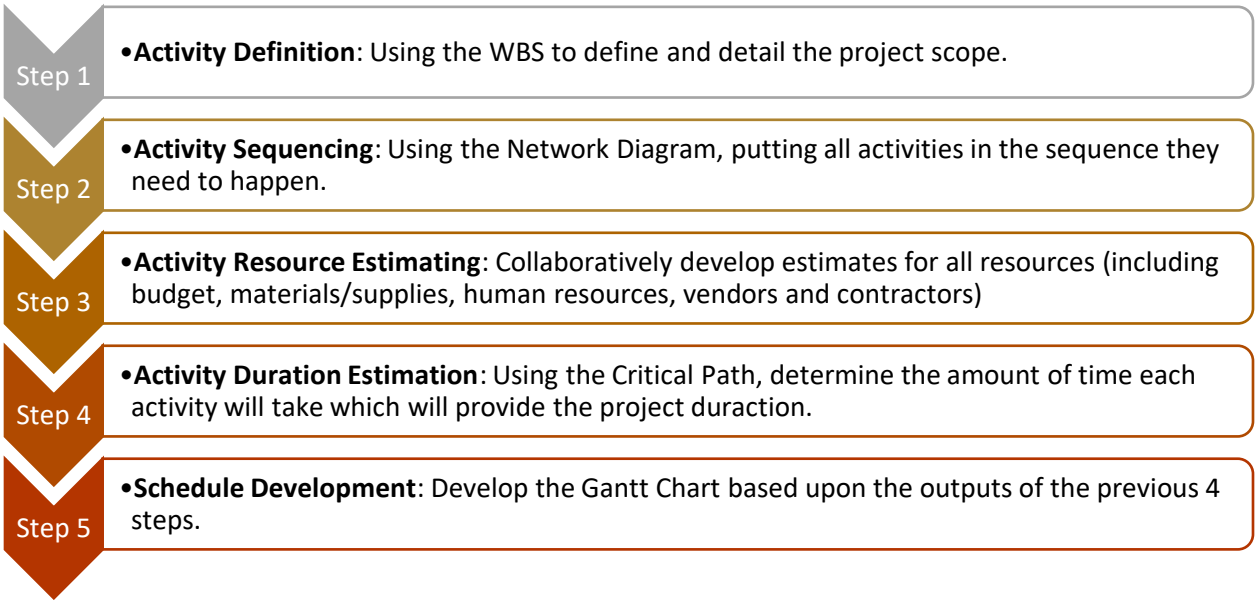


Figure 28: Schedule planning Five Steps

As the project manager, team, and stakeholders involved in the planning move through this 5-step process, it is vital to keep the triple constraint triangle in mind. Remember, the triple constraint triangle represents the dependencies between the scope of work, project schedule, budget and resources, as well as the quality. If one side of the triangle gets longer or shorter, it will affect the other sides of the triangle.

Each step in the schedule planning process builds upon the previous step, so it is essential to be as comprehensive and detailed as possible from the first step to get the most accurate plan for the project. Before diving into the 5-step schedule planning process, it is important to highlight a few points about scope of work as well as risks and constraints as they relate to this process.

Scope of Work

The planning phase is where the **product** scope is broken down in detail, providing a comprehensive list of all the direct and indirect work needed for the project. When determining the **project** scope, the project manager and team need to think about all tasks and activities that need to happen to bring about the outputs, outcomes, and to contribute to the goal of the project.

Like most methodologies, best practices, and project management literature, Project DPro distinguishes product scope from project scope. Although interconnected, these terms should not be used interchangeably:

Product scope – Includes all required deliverables (outputs and outcome) of the project, meeting the agreed specification: what is the project going to deliver/achieve?

Project scope – Includes all of the direct and indirect[4] work (activities and outputs) required to deliver the product scope: how will the project produce the agreed deliverables and achieve the expected change?

The main reason to differentiate product scope from project scope is to help concentrating on the right aspects and details in different project phases and tools.

During the logical frame development, in the Identification and Definition phase, project teams tend to focus only on activities. For example: project A will develop entrepreneurship workshops for women; project B will provide dance and music courses to the community youth; project C will offer organic agricultural techniques to farmers.

These examples represent the project scope (means), not the social / economic / behavior change a development project should aim to achieve. By applying the product scope definition, project teams are reminded that Project Definition (logical frame) should focus on the outputs and outcome. Following the previous examples: Project A will increase the income of women; Project B will improve cooperative and teamwork behaviors among youth; Project C will reduce the pesticide-borne diseases among farmers.

The following table presents the main differences between product scope and project scope.

	Product Scope	Project Scope
When	• Identification and Definition	• Planning
Tool	• Logframe	• WBS
Project Document	• Project Proposal	• Project Planning
What is included	• Outputs, outcome, goal[5]	• Activities, outputs
Guidance	• What is the end result (change) the project will create? • What services / products will be provided by the project?	• How will you get to the end result and change? What work is required to deliver the product and services?
Key question	• What?	• How?

Table 23 Product Scope and Project Scope

Both of these components are critical to project success and need to be outlined in detail during the respective phases of the project. Failure to clearly define the product and the project scopes could present problems later in the project. For example:

[4] In the Step 1 – Activity Definition, ahead, you will find examples and the difference between direct and indirect work.

[5] Although a Logframe includes high-level activities, it must focus on the change in the beneficiaries that the project is expected to achieve.



Figure 29: Examples issues on project scope definition

There are ways to ensure that the project is scoped in a comprehensive and balanced way but will require thought, time, and the participation of stakeholders.

Constraints and Risks.

Most stakeholders do not like to think about risks or feel that risk planning is the responsibility of the project manager. In reality, risk planning (identification and response) is the responsibility of ALL stakeholders. Projects are complex undertakings and no one person can see everything, be everywhere, or consider everything. As such, they must rely on the stakeholders to help identify the many threats to a project, and especially identify potential responses. In the Identification and Definition and Setup phases, we started the process of identifying and planning for risk.

In the Planning phase, the risks need to be considered when developing the scope of work and project schedule. It is also important to revisit the risks that were identified and planned for in the previous phases. Are they still valid? Have probability and impact changed? Have new risks emerged? The risk plan is a living document meant to be monitored and updated regularly. Therefore, the risk plan should include a mechanism to ensure continued review and updating, both to monitor existing identified risks, and well as identify new risk as the project progresses.

Constraints should also be considered as you move into this phase. Constraints can take many forms and affect a multitude of processes. For example, are the materials that are needed to build the latrines available in the local market? If not, will they need to be imported? Is there a particular specialist or expert that will be required for the project? Is this expertise available? If not, how will you proceed? Constraints can take many forms and should be outlined prior to or during the planning process. This will be particularly important in Step 3, Activity Resource Estimating, in schedule planning.

Step 1: Activity Definition

The first step in schedule planning is to define the project scope using the Work Breakdown Structure (WBS). Using the WBS, the project team develops an activity list which comprehensively records all of the activities – **direct and indirect** – within the project scope. The Work Breakdown Structure is the primary tool that project managers use to define project scope. The WBS is a hierarchical decomposition of the work of a project. Put simply, the WBS arranges the project scope in an outline, or hierarchy, of 'work packages.'

The example below is a partially built-out WBS that has two work packages. The level of detail required for a comprehensive WBS exceeds what is shown below. There are several different kinds of activities that need to be completed within each work package. For example, to build the latrine structure, the materials need to be procured and engineers need to design the specifications. The project manager may have an idea of what is required to complete these tasks, but the scope of work will be substantially more comprehensive and accurate if the engineers and supply chain team is involved in the process. This point highlights why it is essential to take a participatory approach to the development of the WBS, involving those stakeholders who will be doing the work of the project.

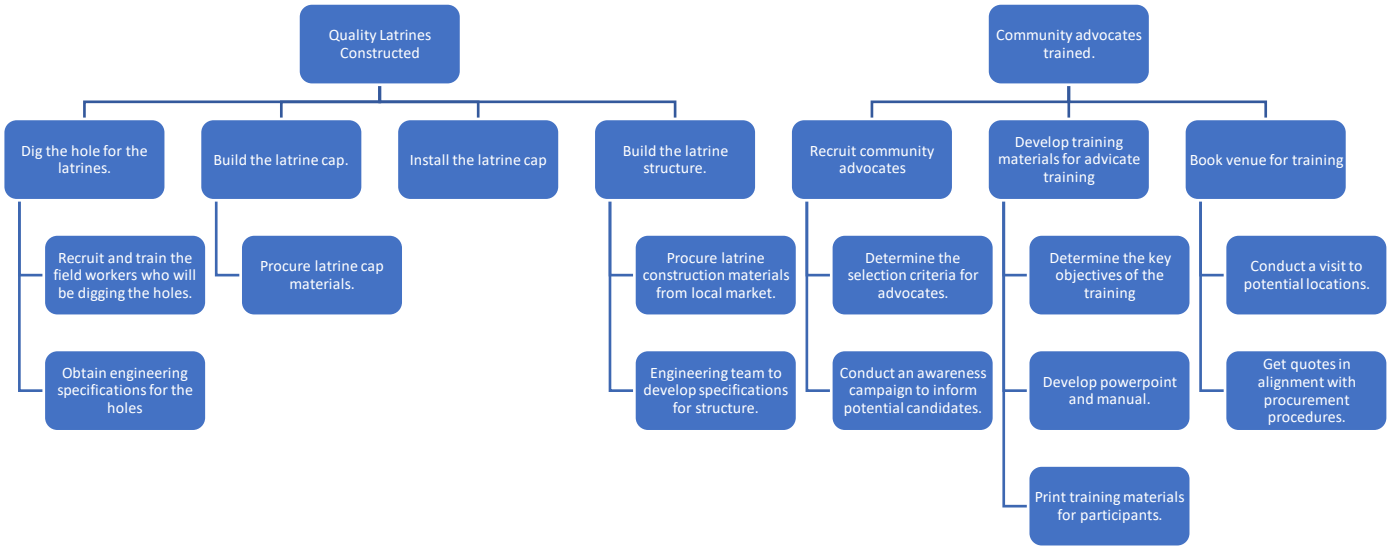


Figure 30: WBS Example – Graphic Format

The WBS must also include all **indirect work** – project activities that are supportive but not specifically part of the direct work of the project. In the example of Figure 31, obtaining the engineering specifications for the holes might require a presentation of the project and a negotiation process with a local authority. Other examples of indirect work are baseline surveys, project monitoring tasks, selecting and hiring the project team (HR), setting up IT systems to monitor the project, or a general capacity training program.

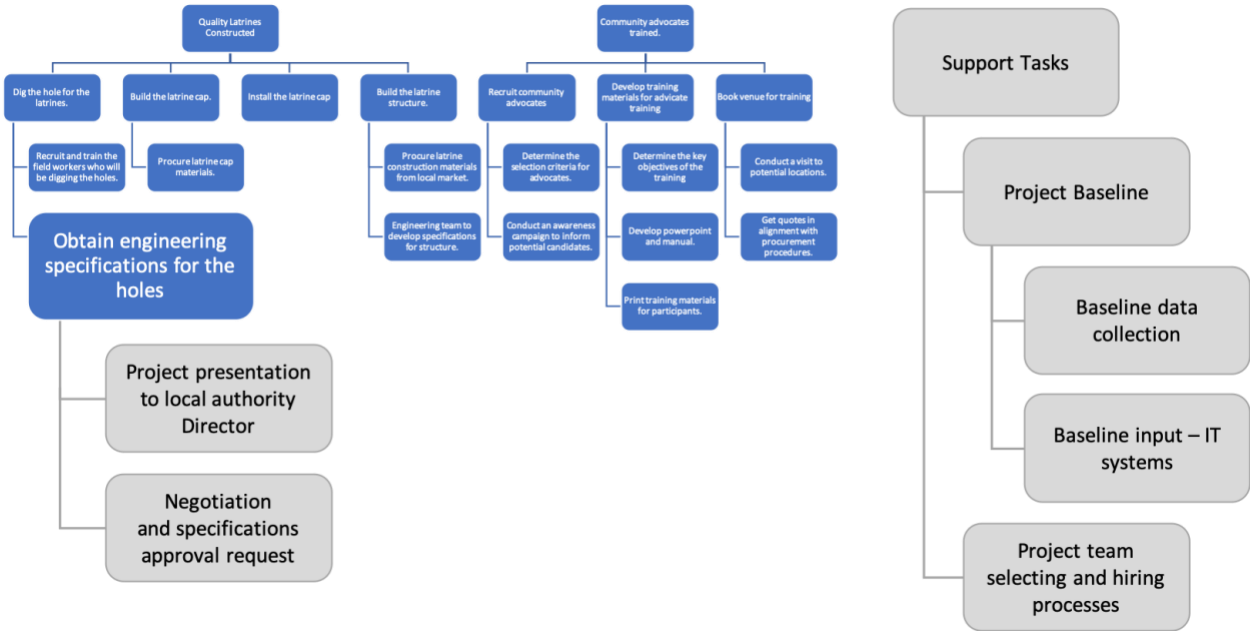


Figure 31: WBS Example – Indirect Work

For those using project management software, or for those who prefer an alternative way to construct a WBS, and indented format can also be used.

There is not one, correct way to construct a WBS. Work packages may be organized differently depending on the team involved. Regardless of the format used, the WBS is intended to ensure that all project scope is detailed.

Figure 32 illustrates one of the work packages from the WBS for our Delta River Latrine Construction Project. If you notice, the activities are broken down into smaller sub-activities but not necessarily in sequence at this point. When you do your WBS for your own project, keep this in mind, we are trying to identify all of the tasks or activities that need to be completed but not putting them into the sequence in which they need to happen. The sequencing will come later in the schedule planning process.

WBS Indented Format

1.1 Build Latrines
- 1.1.1 Pre-construction
  - 1.1.1.1 Plan approval by Government
  - 1.1.1.2 Engineering Specs
  - 1.1.1.3 Plan approval by EPA
  - 1.1.1.4 Ground water study
- 1.1.2 Latrine construction
  - 1.1.2.1 Stakeholder engagement
  - 1.1.2.2 Home owner's approval
  - 1.1.2.3 Site availability
  - 1.1.2.4 Latrine maintenance education
- 1.1.3 Procurement
  - 1.1.3.1 Labor
  - 1.1.3.2 Materials
    - 1.1.3.2.1 latrine construction
    - 1.1.3.2.2 latrine maintenance
  - 1.1.3.3 Permits
  - 1.1.3.4 Licenses
  - 1.1.3.5 Storage

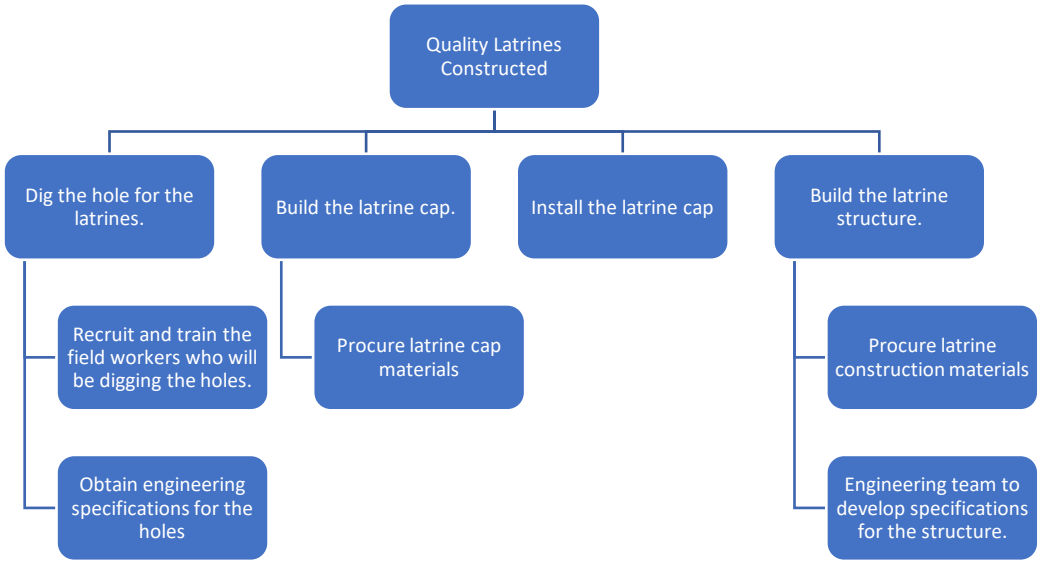


Figure 32: WBS Work Package Latrine Building Project

Step 2: Activity Sequencing

Once all of the activities have been defined, the project team develops a **Network Diagram** which graphically represents the **sequences, relationships, and dependencies** between the activities outlined in the WBS. Based upon the WBS completed in Step 1, the project team can then organize the activities in the sequence they need to happen using the Network Diagram.

Each of the boxes in the network diagram identifies an activity in the project scope. These boxes are connected by arrows that indicate their dependencies which identify how project activities relate to each other within the context of the schedule and the sequence through which the activities need to be completed. In some cases, the sequence of activities is linear, implying a precedent relationship which requires that one activity be completed before another can begin. Other boxes are on parallel paths and can be sequenced independently of each other.

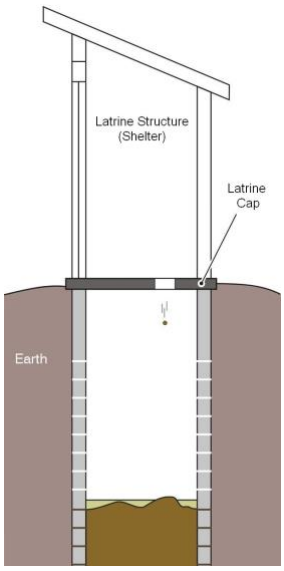


Figure 33: Latrine Example

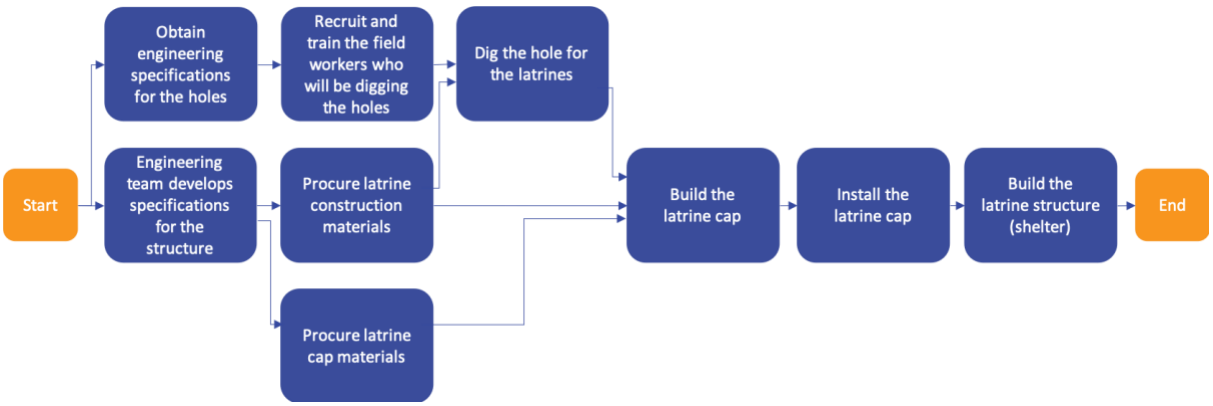


Figure 34: Using a Network Diagram to Sequence Latrine Construction Activities

Interpreting the Network Diagram

What can we interpret from this Network Diagram? What kind of dependencies are there?

- The project team must wait specifications before starting procurements and trainings.
- The project team does not need to await completion of the materials procurement before recruit and training the field workers – these activities can be executed simultaneously.
- The project team must wait for the latrine cap to be built before it can be installed.

Step 3: Activity Resource Estimating

Once the sequence of activities is identified, it is tempting to move straight to activity duration estimating. However, you must first complete the important step of estimating resources. There is a strong relationship between resource and time estimation. Everyone knows that it will take one person longer to dig a hole than it will take a team of five people to dig a hole, as long as you have enough equipment for the five people. Furthermore, duration estimates will vary considerably depending on whether the excavation team plans to use a single shovel, a pneumatic drill or dynamite to make the hole.

Resources matter. They are one of the central factors influencing the project duration estimates. Therefore, resource decisions need to be made before duration estimates can be made. Decisions relating to the number and quality of resources committed to an activity, in turn, are contingent on a number of factors, including (but not limited to) the following:

Time – If there is a very tight timeframe, the project may choose to dedicate high levels of staff, materials, and equipment to meet time constraints. If the timeframe is flexible, the project may choose to dedicate lower levels of resources allocated to an activity.

Budget – If funding is in short supply, the project might choose to invest in a 'low cost' resource mix. For example, more manual workers and less machinery are a preferable low-cost alternative. This resource decision, however, will extend the duration of the latrine building activities.

Regulations and Organizational Policies – Often projects are constrained by labor laws and/or internal organizational policies that limit work schedules (hours per day, days per week, holidays per year, family leave policies). These constraints influence resource availability and consequently duration estimates.

Other Factors that Influence Resource Availability – A number of other factors influence resource availability, and thereby will influence activity duration estimates. Some examples of these factors include:

Environmental/Weather Constraints: Building latrines during the rainy season is, generally, not a good idea so these activities need to be planned around the seasons.

Material Constraints: Materials for building the latrines may not be available in the local market requiring that they be procured from outside. This will, undoubtedly, increase the time required to procure the materials.

Logistics Constraints impede an emergency relief project from accessing transport, extending the time required to fill food warehouses.

Level of Effort and Resource Estimation

When determining the resources required for the successful implementation of a project, it is important to be mindful of the level of effort for each team member.

For local partners and CBOs, this could be more challenging because you will likely have team members working on multiple projects. You may even have a project manager who is managing several projects.

Estimating the level of effort (LOE) required for each project and reflecting that in your resources planning – especially in the budget – is incredibly important. If these estimates do not reflect the reality, you run the risk of being accused of fraudulent activity.

Human Resources Constraints impede a health project from accessing qualified labor, extending duration estimates for technically complex activities.

Planning and Known Constraints

During planning, there are known constraints that the team needs to be mindful of. For example, if there are specific holidays that come every year, the activities should be planned around those holidays. Likewise, are there weather conditions that could prevent or inhibit project activities? Does your area experience a rainy season that could delay the digging of the holes for latrines? This should also be factored into the schedule of activities because there are historical precedence and knowledge that they will or may occur.

Budget Planning

Regardless of the project or the format of the project budget, a financial plan is only as good as the estimates upon which it is based. To an extent, there is always going to be risk associated with project estimates. Estimating will never be a precise science that produces 100% accurate results. Project managers can't predict the future. There will always be project variables that will lie outside the control of the project team.

And yet, while there are abundant reasons why making accurate estimates is a challenge, estimates can be sufficiently accurate to support good project decisions. Furthermore, there are best practices that help project managers improve the accuracy of their budget estimates:

Choose the right approach to make the estimate – Estimates are normally developed through a combination of the following three techniques:

Top-Down estimates start with a global estimate for the cost of a project and then assign a percentage for that total to different phases or work packages of the project. The percentages assigned to the components are generally identified by individual(s) who have previous experience on similar projects. This approach to estimating tends to be more exclusive and involves a relatively small group of people who are considered to be "experts", based on their past experience.

Bottom-Up estimates do not start with a global estimate of the cost of the project. Instead, tasks are estimated and "rolled up". In this model, the estimates are solicited from the people who have knowledge of the field reality of the project, and who are often the same people who will be responsible for implementing project activities (including partners, suppliers, community members, etc.). Bottom-Up estimating tends to involve a larger number of participants and requires more effort to manage. Bottom-up estimates are more likely to be accurate as field staff will probably have a better awareness of the resource constraints that impinge on cost estimates. For example, they may know, more precisely, the different resources communities can provide to help with latrine digging – giving a much better estimate than assuming that all communities can provide the same resource.

Parametric estimates rely less on people and instead uses a statistical relationship between historical data and other variables (for example, square footage in construction, meters of roads, etc.). Parametric estimates tend to be used for projects and project components that produce concrete outputs (for example, infrastructure building, road construction translation

services, etc.). Here the estimate is made by identifying historical data from projects that delivered similar outputs (for example, miles of road, square footage in construction, lines of text) and using it to calculate estimates for scope/quality, cost/resources, and/or time/calendar. This technique can produce higher levels of accuracy but depends on the quality of the underlying data built into the model.

Activity Based Budgets

One way to more accurately plan for your budget is to use an **Activity Based Budget**. Activity-based budgeting focuses on identifying costs of activities that take place in every area of a project and determining how those activities relate to one another – including direct and indirect work.

If a project manager is able to develop a complete (both comprehensive and decomposed) list of activities along with cost estimates for activities, then a budget will be more accurate. Activity-based budgeting also offers more opportunities for other teams (HR, finance, supply chain) to get involved, making it more likely that a budget will be accurate.

While there are a number of possible activity-based budget formats that add details such as account codes, donor codes, and unit costs – they all have two similar requirements:

1. Develop a complete list of activities during scope planning.
2. Work out what will be needed to achieve each activity and estimate how much each will cost.

By meeting these two requirements, the budget will provide details for each activity and show associated costs that can, in turn, be monitored. If monitoring shows that actual expenditures have exceeded cost estimates, then a project manager will know that the project is unlikely to deliver the complete project scope. Re-planning of work must be done to find more efficient ways of implementing remaining activities. Alternatively, the manager can request a Project Board, or other Project Governance structure, to adjust scope.

Activities	Costs per quarter				Total	Activity Total
	Q1	Q2	Q3	Q4		
1.1 Direct Project Costs						
OFFICE EQUIPMENT						
1. Computers	2,000	2,000			4,000	
2. Tablets	500				500	
3. Office Furniture	3,000				3,000	
						7,500

Activities	Costs per quarter				Total	Activity Total
	Q1	Q2	Q3	Q4		
PROJECT TEAM RECRUITMENT						
1. Project Manager	800	800	800	800	3,200	
2. Office Staff	200	300	300	300	1,100	
						11,800
1.2 Stakeholder Engagement						
Stakeholder Launch and Progress Meetings						
1. Prepare written presentation materials		5,000			5,000	
2. Prepare video	1,000	1,000	4,000		6,000	
2. Stationery			200	200	400	
3. Refreshments			100	100	200	
						11,600

Table 24: Activity Based Budget

Step 4: Activity Duration Estimating

Once resource estimates are complete, the Network Diagram should be revisited, and duration estimates will be added to all the activities. Returning to the Delta River Project case study, Figure 35 provides the finalized network diagram for the latrine construction component of that project.

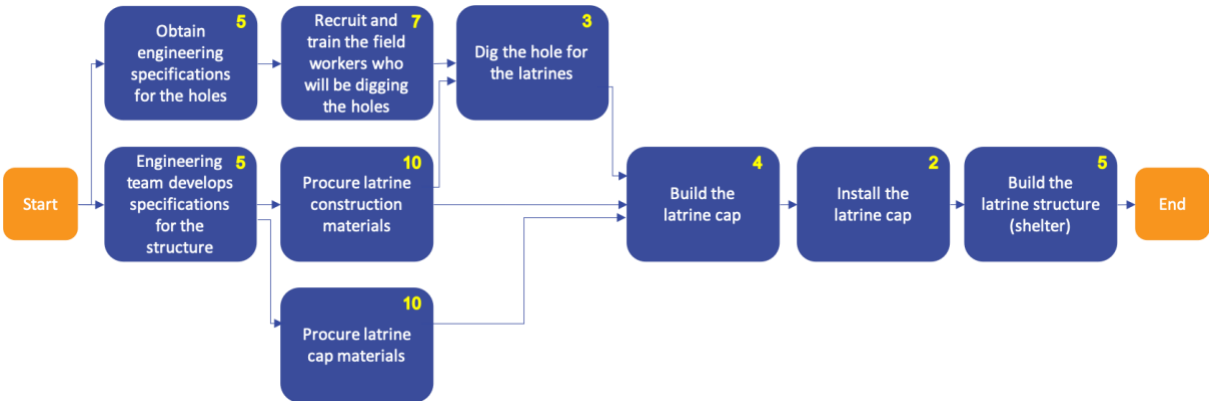


Figure 35: Network Diagram for the Delta River Project Latrines Component

Now that the Network Diagram is complete, it can be used to help the project team identify:

The Project's Critical Path – The **critical path is the series of tasks that determines the minimum amount of time required to complete project activities**. In Figure 36, the critical path is the series of orange tasks. Why this sequence of activities? Because this sequence of tasks represents the longest path between the project's start and its end – in this case 29 days. In this example, the critical path is telling us that it is impossible to complete the project in less time than 28 days UNLESS the other constraints in the project constraint triangle are changed (money/resources or scope/quality).

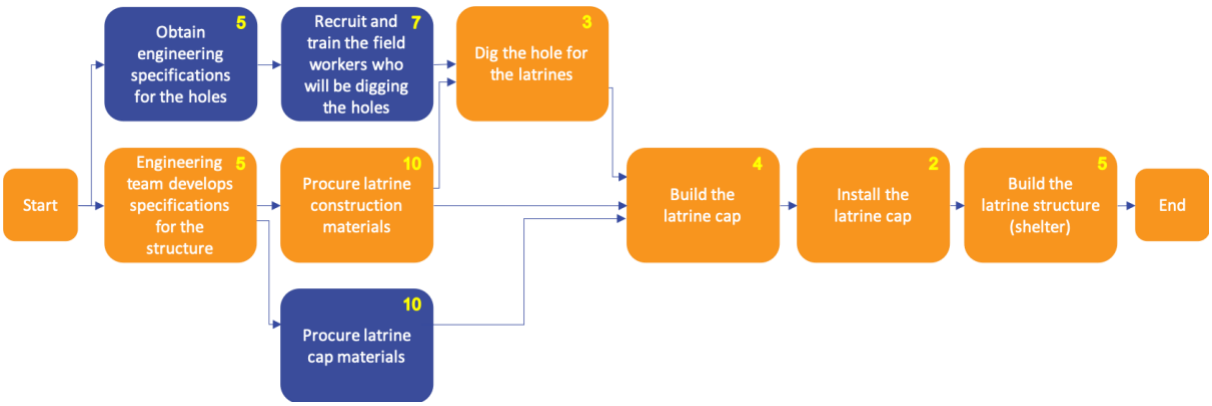


Figure 36: Network Diagram for the Delta River Project Latrines Component – Critical Path

The Project Float (or Slack) – In project management, **float or slack is the amount of time that a task in a project network diagram can be delayed by without causing a delay to the project completion date**. In the latrine example, there is zero float on the critical path. However, the 'Recruit and train the field workers who will be digging the holes' activity could be delayed by up to three days without impacting the project schedule. Similarly, 'Procure latrine cap materials' could be delayed by up to three days without impacting the project schedule. If a project activity that is not on the critical path is delayed beyond the late start date, this could mean that the critical path determined in the project plan is no longer the critical path.

Step 5: Schedule Development

Based on the estimates generated through the previous steps, the project team can now develop a project schedule. Within the development sector, the preferred tool for project schedule development is the Gantt Chart, which is also sometimes referred to as the work plan. Planning and implementing projects can be made easier if it is viewed as small manageable items where the dependencies are visually illustrated, parallel processes are apparent, and the overall schedule is portrayed graphically. A **Gantt Chart uses bars to graphically represent the schedule of project activities, including their start date, end date, and their expected durations.**

The complexity and comprehensiveness of the Gantt chart will vary. At its core, the Gantt chart tool has the advantage of being relatively easy to prepare, read and to use. However, it is important to recognize that the tasks of a project can be quite complex and many dependencies can exist between them.

One way to retain simplicity in the Gantt Chart, even when tasks and dependencies are complex, involves rolling up the broader, more comprehensive activities of a project into a summary Gantt Chart, with details being further elaborated on a detailed schedule.

The summary Gantt Chart will not only differ from the detailed Gantt Chart with regard to the level of detail, but also with regard to its purpose. The summary Gantt Chart will be especially helpful when discussing the high-level progress of the project with stakeholders (project board members, key stakeholders, donors, etc.). The purpose of the detailed Gantt Chart, however, will be less focused on high-level communication and much more focused on the operational planning, implementation and monitoring of activities. Here, the audience will focus on the project team and the implementing partners and suppliers responsible for completing project work packages and tasks.

In the Figure 37, the work packages, tasks, and subtasks are on the y-axis (lines), and the time line is on the x-axis (columns). The bars show when a task should start and when it will be finished. The outlined boxes provide the summary roll up schedule for the work package. Darker (blue) cells show tasks which have been completed. Light (blue) cells show work which still must be done. Orange cells show a group of activities (lower WBS level). Note that this Gantt Chart is designed to be updated, providing the project team with a tool not only to indicate what activities are planned for each month, but also providing a visual tool to track which project activities are completed (and which are not).

Planning for Humanitarian Projects

The nature of humanitarian and emergency relief projects require that they are deployed quickly, leaving little time for planning. However, that doesn't mean that the same 5-step process cannot apply.

In humanitarian projects, these steps are done more quickly and it would be beneficial to incorporate a stage planning approach and decision gates into your planning process so that you have the ability to more quickly adapt to the continuously evolving context.

In the Latrine Project Gantt Chart, the table was built using a computer program. While this is frequently the case in development projects, other tools could also be used. For example, Gantt Charts can be drawn by hand, either on paper or on white boards that are retained in the project office. Another option for developing and managing Gantt Charts is employing project management software like Microsoft Project or any of the dozens other programs on the commercial market.

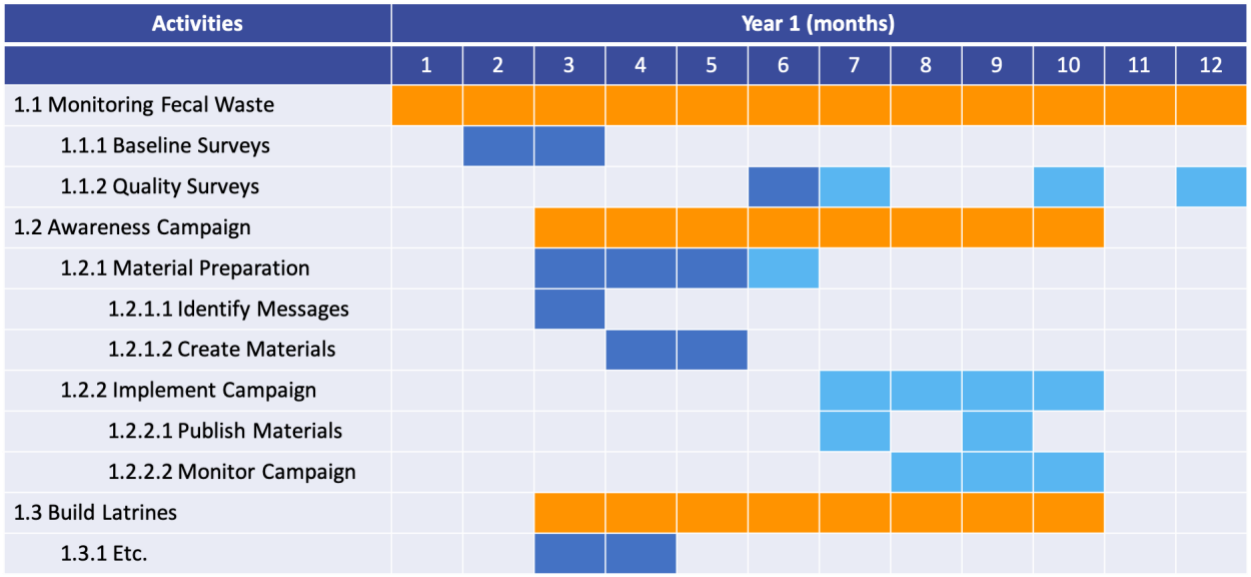


Figure 37: Gantt Chart for Latrines Project (limited build out)

There are many factors that should be considered when deciding which tool to use to develop the Gantt Chart. Some of these criteria include:

1. Access to computer software;
2. Computer and software skills;
3. The value and complexity of the project;
4. Feature richness;
5. Strength/Flexibility for managing project changes and updating project plans.

Often, the overriding criteria that development organizations consider when making decisions are points one and two in the list above. The reality is that project teams in the development sector tend to lack access to project management software or the skills to use these software. For this reason, project teams tend to manage their projects by hand or by using word processing and spreadsheet programs.

This decision is reasonable; however, it is important to acknowledge that as projects increase in their level of complexity and risk, the commercial project management software include advanced features that are especially helpful. For example, Gantt Charts made in project management software include features that allow project teams to:

- **Identify linkages between project dependencies** – automatically identifying what tasks must be completed before others can be started. Furthermore, identifying when changes to the completion of one task will lead to delays in the initiation of other activities.
- **Track activities along the critical path** – automatically flagging when delays in activities along the critical path threaten to delay the overall timeline of the project schedule.
- **Link the project Gantt Chart to other critical project management documents** – automatically identifying when changes to the project Gantt Chart require that integrated changes be made to other project documents like the project Budget and the project Work Breakdown Structure.

MEAL Planning

Monitoring and evaluation are cornerstones for any project. However, the planning and implementation of this process needs to be done well. There are a lot of thought and consideration that goes into developing a comprehensive MEAL plan.

Monitoring

Monitoring tracks the operational work of the project. It answers questions like: "Have activities been completed as planned?" "Have outputs been produced as anticipated?" "Is the work of the project progressing as projected?" "What is the difference between what we had planned and what is actually taking place?" Project monitoring informs the project manager where the project performance is in terms of money, time, risk, quality, and other areas of project progress. Monitoring takes place, primarily, at the activity and output levels and is done continuously throughout the project.

The monitoring plan should include the process that will be used to monitor and update the progress of activities against the plan and any reporting requirements. The MEAL team will be doing the monitoring but the project manager needs to be informed, regularly. This could be in the form of regular project team meetings, reports, site visits, etc. The important aspect is that the project manager has a mechanism to continually monitor and update progress, to identify delays in schedule or any issues that need to be addressed or escalated to the project governance structure.

What	A continuous review of project progress at the activity and outputs levels Identify necessary corrective action
Why	Analyze current situation Identify issues and find solutions Discover trends and patterns Keep project activities on schedule Measure progress against outputs Make decisions about human, financial and material resources
When	Continuous
How	Field Visits Records Reports

Table 25: The What, Why, When and How of Monitoring

Evaluation

Project Evaluation tends to focus on tracking progress at the higher levels of the logical framework – i.e., project outcomes. Evaluations tend to explore questions like, "Is the project successful at achieving its outcomes?" "Is the project contributing to its ultimate goal?" Evaluation data is collected and analyzed less frequently and often requires a more formal intervention (often by technical advisors or external evaluators) to show project results.

What	Gathering and analyzing information to determine: Progress toward delivery of activities/outputs; and contributing to achievement of outcomes/goals.
Why	To measure project effectiveness To determine whether outcomes have been achieved To learn how well things are being done To learn lessons for future improvement

When	Periodically (the frequency depends on the resources the project is willing to invest)
How	Internal Evaluations External Evaluations

Table 26: The What, Why, When and How of Evaluation

Evaluations usually take place at the program level, but may also take place at the project level, depending on the project length, budget, complexity, and type of project you are implementing. However, as your project is likely part of a program, you need to be aware of what evaluations are taking place and when. Each kind of evaluation has a specific purpose and is done at a specific point in the project.

Final evaluations are often mandated by a funding agency or required by a development organization's own policy, would be conducted toward the end of the project. Common questions might include:

- Did the project succeed at accomplishing the outcomes, goals and impact desired?
- Was the project relevant, effective and efficient?
- Does the project have the potential to be sustainable in its operations and impact?
- Is the theory expressed in the logical framework upheld?

Real-Time evaluations offer the advantage of answering many of the same questions posed through final evaluations, but also provide the opportunity to supply suggestions to improve the project efficiency and impact while the activities are still underway.

Ex-post evaluations examine project impact at a defined period of time after project completion, sometimes a year after the official close of the project. Sometimes called a sustainable impact evaluation, an ex-post evaluation measures the extent to which project outcomes and impacts have been realized through participant ownership. Ex-post evaluation findings can be an especially useful way of using evidence to advocate an improved development approach. For example, an ex-post report was used by one development organization to help convince a donor to support numeracy and literacy training within a microfinance program.

If you are conducting an evaluation as part of your project, you will also need to plan for it. There are substantial resources and funding required to effectively conduct an evaluation, particularly if an external evaluator is part of the process. You will also need to consider the timeframe for the evaluation to be conducted and explore any constraints the evaluator may have. Planning for evaluations should be done during the Planning Phase and not as the project is closing. Using the following Summary Evaluation Table may be helpful in outlining the frequency and purpose of evaluations within your project.

Evaluation Purpose	Key Evaluation Questions	Timing	Internal or External	Start and Complete Start	 End	Evaluation Budget

Table 27: Summary Evaluation Table

Accountability and Learning

Accountability, in the MEAL context, is ensuring that there are mechanisms in place to request and receive feedback from stakeholders during the project, learn from that feedback, and use it as a tool for iterative project planning. Accountability also means that the project team should be as transparent and participatory when possible, including stakeholders (community and beneficiaries particularly) in processes and sharing information about the project if and when possible. During the Planning phase, you will need to work with the MEAL team to ensure that accountability mechanisms are planned for and in place. Whether that be posters explaining the rights of beneficiaries or a hotline to obtain feedback from beneficiaries and stakeholders, the important thing is to ensure that there are ways that stakeholders can provide feedback to the project team about their experience and needs during the project.

Learning should be incorporated throughout the entire life of the project. Establishing points within the project where the team and stakeholders will reflect on the project – using information and data from the monitoring, accountability, and implementation plan progress – will contribute to ensuring that the project is achieving what it set out to achieve and provide a culture of learning within the project. Project learning can also be incorporated into the iterative planning process of rolling-wave planning, providing feedback to the project manager, team, and stakeholders.

The MEAL Plan

The MEAL plan should directly relate to your indicators, activities, and outputs. You will want to ensure that you have developed an integrated and comprehensive MEAL plan so that the information and data you obtain can help to inform the decision-making about the project.

These processes require a lot of thought and input from the MEAL team within your organization. Also keep in mind that the MEAL plan will likely consist of a multitude of documents. Any standard MEAL plan should include basic elements such as:

- Indicator Performance Tracking Table
- Performance Monitoring Plan
- Feedback Mechanisms
- Evaluation Plan and Statements of Work
- Accountability Mechanisms
- Learning Plan

Regardless of the ultimate format a project employs to establish its plan for MEAL, as a minimum standard, every monitoring system should abide by the six essential elements of indicators, schedule and budget, staff and partners, full data cycle, data management, and linking to the next level.

Indicators	Clearly defined Baselined Systematically measured
Schedule and budget	Time and money are allocated for monitoring tasks Schedule processes for data collection, review, summary, analysis, and feedback
Staff/partners	Clearly identified monitoring responsibilities Competencies Plan monitoring activities with the community Build capacity of community members on community-based monitoring systems Use participatory monitoring techniques Gather and verify monitoring data Process monitoring data
A full data cycle	Including a full cycle for managing monitoring data: **1. Collection; 2. Review; 3. Summary; 4. Analysis; 5. Feedback**
Data management	Procedures exist and are used to ensure integrity of data and proper storage of data
Link to the next level	The project monitoring system is linked to the next level of the organization's program or portfolio.

Table 28: MEAL Six Essential Elements

Internal Controls

If your organization is well established, it will likely have internal control systems developed. However, there may be cases where some control systems are not developed or not comprehensive enough to comply with donor and project requirements. The project manager should be aware of the internal control systems that are in place and work toward ensuring these are integrated into the project.

Internal control processes should be designed with the objectives of:

- Promoting the effectiveness and efficiency of operations;
- Increasing the reliability of project outcomes;
- Promoting compliance with applicable laws and regulations;
- Protecting organization resources, both physical (e.g., human resources, machinery, and property) and intangible (e.g., reputation, intellectual property);
- Reducing risk of fraud and corruption.

A key component of the organizational capacity of the project includes establishing internal controls that comprehensively address the entirety of the support, administrative and logistic systems required for successful implementation. Areas that benefit from internal controls include:

- Human Resources Capacity and Systems
  - ✓ Are Human Resources policies documented and in compliance with local laws and organizational regulations?
  - ✓ Do systems exist for timesheets, performance reviews, and employee separation?
- Procurement
  - ✓ Do systems exist to select suppliers?
  - ✓ Do supplier selection criteria exist?
  - ✓ Do systems exist to manage suppliers?
  - ✓ Do similar systems exist for consultants?
- Financial
  - ✓ Do systems exist for cash management? Expense management? Financial reporting?
  - ✓ Is there a segregation of duties for financial roles?
- Inventory
  - ✓ Do systems exist for the identification and tracking of inventory?
  - ✓ Do systems exist for the use/transfer/disposal of equipment following project closure?
- Contracts and Agreements
  - ✓ Do systems exist for grants management?
  - ✓ Do systems exist to manage relationships with implementing organizations?
- Infrastructure
  - ✓ What systems exist for communications? Telephones, internet, radio?
  - ✓ What systems exist to manage vehicles and transport?
- Security protocols
  - ✓ Is there need for special security arrangements? Travel guidance? Accompaniment programs? Other?
- Fleet Management
  - ✓ Are there mileage logs that control the use of service vehicles?
- Information Management
  - ✓ Is there a record keeping system (paper/electronic) in place?
  - ✓ Do policies and standards exist for information management?
  - ✓ Are documents, contracts and receipts accessible to meet the audit requirements of the project?

It is important to recognize that internal controls can provide only reasonable assurance – not absolute assurance – regarding the achievement of an organization's objectives. Furthermore, poor or excessive internal controls reduce productivity, increase the complexity of systems, increase the time required to complete processes and add no value to the activities. However, good internal controls are essential to ensuring the accomplishment of goals and objectives. They help ensure efficient and effective operations that accomplish the goals of the project and still protect employees and assets.

Communication and Stakeholder Engagement Planning

Communication and stakeholder engagement don't happen automatically. There needs to be a specific plan put in place that outlines the communication that needs to take place in the project as well as how and when to engage which stakeholders. The challenging part is to understand who needs to be

communicated what and when. This may be a good time to bring in the project governance, program manager, and stakeholders to ensure that their feedback and advice are considered.

Some examples of what can be included in a Communication Plan include:

- Narrative and Financial Reports
- Regular Meeting Schedules
- Press Releases and External Publications

A communications plan will identify what needs to be communicated to whom, how, and when. Using the communication plan template below provides clarity on the communication that is required to happen during the project.

Stakeholder	Communication Method	Informational Needs	Frequency	Responsible Team Member
Funder/Donor	Report	Progress against outputs and outcomes and financial status	Monthly	Project Manager
Ministry of Water Resources	Face to Face Meeting	Progress of the activities	Quarterly	Project manager

Table 29: Communication Plan

A Stakeholder Engagement Strategy was developed during the Setup phase. Once the planning has begun, project manager and team will have more clarity on the direction of the project. Updating and revisiting the stakeholder engagement strategy during the Planning phase will ensure that it aligns with the implementation plan and that the right stakeholders are involved at the right time.

Stakeholder	Role in Activity	Interest in Activity	Engagement	Follow-up
Who is the stakeholder?	What will they do in this activity?	What is their interest in participating in this activity?	How will we engage them to ensure their participation?	What kind of feedback and follow-up is required?
Local Municipality Official	Provide an opening speech for the project launch.	Participation will provide exposure for the municipality and official and demonstrate that they are interested in providing support for projects that will help the community.	Coordinate and communicate about the project purpose through an official letter followed by a meeting to request buy-in and participation in the launch.	Send an official thank you letter and include their role in the activity in the official press release. Have a follow-up meeting with official(s) to answer any questions and request their engagement in future activities.

Table 30: Stakeholder Engagement Strategy

Formal and Informal Stakeholder Engagement

Stakeholder engagement can be complicated. There will be a formal strategy that you will outline and follow but there also maybe informal channels used to engage stakeholders. For example, a phone call with implementing partners that isn't "officially" part of the scheduled engagement strategy but is important for ensuring that the communication channels are open and available. While these informal methods may not be planned for, they are something the project manager should be mindful of throughout the project.

Roles and Responsibilities Planning (RACI)

A project manager seldom works alone. Even the smallest projects depend on networks of stakeholders. As the complexity of projects increases, the web of relationships expands until it could potentially include community groups, government ministries, suppliers, local non-governmental organizations, universities, faith-based organizations and others.

One of the challenges when managing a network of stakeholders is ensuring there is clarity regarding the roles, responsibilities, authority and communications of different project actors. One tool that helps with this challenge is the RACI chart – a matrix typically created with a vertical axis (left-hand column) of tasks or deliverables, and a horizontal axis (top row) of roles and which derives its name from an acronym of the four key roles most typically identified in the matrix:

Responsible A Responsible person includes those who do the work to achieve the task. For each task there is typically one role that is the lead in completing the work, although others can be delegated to assist

Accountable An Accountable person must approve (sign off) the work that the Responsible person provides. There **must** be only one Accountable person specified for each task or deliverable.

Consulted Those whose opinions are sought; and with whom there is two-way communication.

Informed Those who are kept up to date on progress, often only on completion of a task or deliverable; and with whom there is just one-way communication.

The following chart provides an example of a simplified RACI for the Delta River Project:

Activity	Responsible	Accountable	Consulted	Informed
Obtain engineering specifications for the holes	Project manager	Compliance Director	District Constructions Department	Project Team
Procure latrine construction materials	Adm/Fin Assistant	Project manager	Administrative Director	Project Team
Dig the hole for the latrines	Project Team led by Paul	Project manager	Households	

Prepare project progress report	Paul	Project manager	Project Team	Key Stakeholders
Prepare project financial report	Adm/Fin Assistant	Project manager	Financial Department	Key Stakeholders
Project Monitoring	Project manager	Program Manager	Project Team	Key Stakeholders

Table 31: Delta River RACI Matrix

The RACI should be developed collaboratively, gaining consensus and buy-in from team members and stakeholders on the tasks and roles for each task. Once developed, the RACI matrix can be shared among the project team and with project stakeholders to help ensure an understanding, and expectations, of project roles and responsibilities.

Supply Chain Planning

The supply chain plan must be integrated into the development of the schedule plan and involve the relevant stakeholders in the process. All three components of the supply chain need to be planned for in coordination with the schedule. Considerations should be taken regarding any constraints that exist, for procurement and logistics especially. This planning process should be done with the supply chain team members and it may also be beneficial to include the program manager. The program manager will have an overview of what the supply chain requirements are across all projects within the program. There may be the opportunity for combining the efforts across projects to manage the supply chain.

Procurement – It is advisable to create a Procurement Plan whenever the project requires that items are purchased from suppliers. A good Procurement Plan will go one step further by describing the process you will go through to appoint those suppliers contractually. The steps in procurement planning include:

- Defining the items you need to procure;
- Defining the process for acquiring those items;
- Scheduling the timeframes for delivery.

Logistics – A Logistics Plan defines the products and services that the project will receive from external suppliers. Since many projects are dependent on the timely delivery of materials, proper logistics support is an important necessity. Logistics means having the right thing, at the right place, at the right time. In its most limited sense, logistics involves the transport of goods, but there is more to it than this. In a much wider sense, logistics includes all the activities required to deliver items accurately, efficiently and in a time-bound manner to the place and person it is meant to be sent. This wider definition of effective logistics involves:

- Inventory management and warehousing
- Materials transport

Assets –All project equipment, supplies and other property financed or provided by the project should be considered a project asset. As such, the project should identify a policy of asset management whereby materials of value to the project are monitored, maintained and disposed of in a manner consistent with the requirements of the organization and/or the donor(s). This policy should include guidance on the following topics:

- **Definition of Assets:** Each organization will need to set its own definition of value and useful life that defines what an asset is. This definition will vary depending on the organization, the donor and/or the project. The UNDP, for example, identifies the threshold for fixed assets as USD $1,000 or more, and a useful life of at least three years. The table below provides an overview of several of the major categories of assets it manages, and the lifespan for each of those asset categories.

CATEGORY	LIFESPAN	OTHER FACTORS
Typical office items that run on electricity: (e.g., computers printers)	3 years	
Large machinery: (e.g., generators, air conditioners)	20 years	
Furniture	10 years	
Vehicles	5 years	OR 100,000 kilometers (62,000 miles)

Table 32: UNDP Asset Categories

The project manager is responsible for making sure that these components are being planned for in a participatory manner with the supply chain team. Involve them in the planning process and ask for their honest feedback on the resources required and the timeframe needed to effectively implement their activities. Having an accurate and clearly defined Supply Chain Plan will be incredibly beneficial as you move into the implementation of the project.

Human Resources Planning

People make projects. The fundamental driver of all projects is the human resource power. Planning for your human resource needs should be done in coordination with your HR Department and any other relevant internal and/or external stakeholders. This is particularly true if working with implementing partners. Delays in projects often occur as a result of the length of time it takes to recruit team members and staff turnover during the project.

During the Identification and Definition and Setup phases, we did a high-level analysis of what will be required for the human resources in the project. For the proposal, personnel, a project organogram, and levels of effort may also have been outlined. However, there is a substantial amount planning that needs to go into the human resource aspect of the project. If you remember, one of the competencies of a project manager is Leadership/Interpersonal skills, part of the “art” of project management. A well-rounded project manager will have a comprehensive human resource plan in place that will consider the following:

- Who will be required and when?
- Will any technical experts be required?
- Will you be working with contractors and vendors and what role will they play?
- What are the staff development capacities and plan?
- How will team members be evaluated?
- What kind of motivational system is in place? How will staff be rewarded/reprimanded?
- What does the project organizational chart look like?

Stage Plans

Throughout the project, it is important to treat the implementation plan as a 'living' document, not one that is static and unchangeable.

If the project is longer term or complex in nature, scope planning using stages may be more appropriate. For each stage in the project, a comprehensive scope of work is identified. Take, for example, a project that is divided into 4 stages. During the planning, a comprehensive scope of work will be developed for stage 1 base upon the deliverables during that stage. High-level activities and deliverables will be identified for the remaining 3 stages but not detailed until further into implementation. As stage 2 approaches, the team will get together again and validate the deliverables and activities for that stage and develop a comprehensive and detailed scope of work for that stage. The process continues throughout all stages of the project.

A stage plan allows for more adaptability in the implementation plan by establishing high-level deliverables for each stage – frequently represented as a period of time – and developing Detailed Implementation Plans for each stage as they approach. As illustrated in Figure 38, a stage plan allows for more flexibility to adapt to the changing situation and continuously validates that the project should move forward (or validates any changes to the project as well) through the Decision gate process.

Stage Planning for Long Projects

Longer term projects may benefit from the stage planning process. It is virtually impossible to plan a year, two years, three years in advance. Stage planning for longer term projects provides the team with the opportunity to revisit, revalidate, and justify the project activities, timeline, and budget for upcoming stages, making the implementation plan living and more relevant.

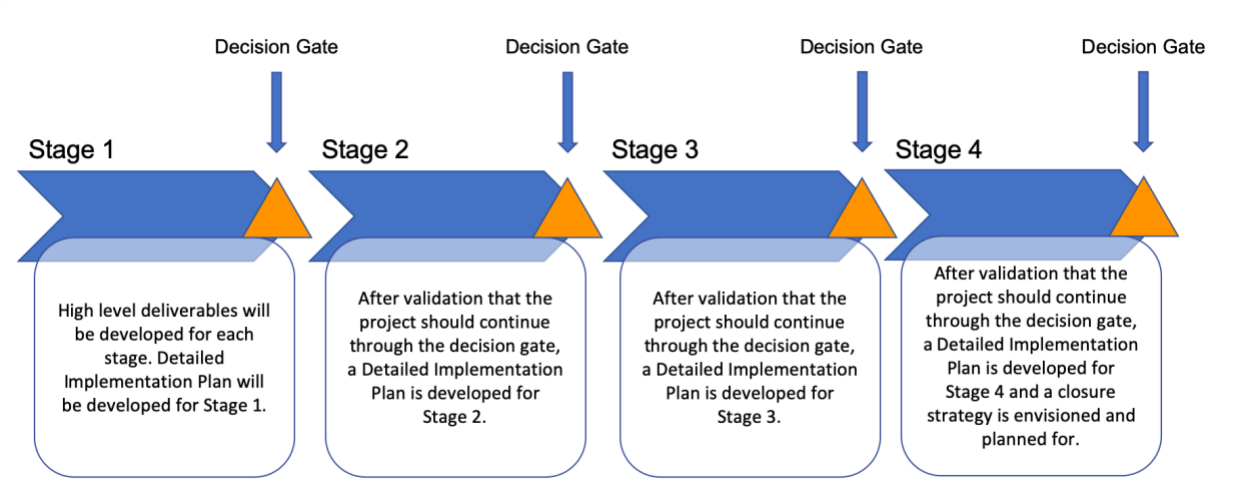


Figure 38: Stage Plan

Stage Planning for Humanitarian Projects:

Humanitarian projects are dynamic in nature and require that the project manager and team quickly move through the first two phases of the project. During Planning, it may be more effective to utilize stage planning to ensure that the project is responding to the changing needs for the beneficiaries. In humanitarian response projects, the number and type of beneficiaries that require assistance often changes.

For example, if you are doing a project that consists of distributing food, NFIs (non-food items), and shelter (tents) that takes place over 6 weeks that involves several distributions in multiple locations. Each distribution could be considered a stage in which you plan for the first distribution in detail and employ a decision gate at the conclusion of each stage to re-examine the needs, number of beneficiaries, and methods of distribution.

Sustainability Planning

Sustainability in projects has become paramount for donors and stakeholders. The efficacy of the sustainability in a project is only as good as the planning for it. There are several elements that need to be considered. In the Identification and Definition and Setup phases, the concept of sustainability was explored. In planning, more concrete plans for sustainability need to be developed. This process will go hand-in-hand with the closure planning process. The sustainability plan may not be absolute or clear until part-way through the project. It may even change at some point, depending on the context. With that being said, it is critical that the sustainability planning be revisited and revised (decision gates may be good points to revisit these plans) as the project moves forward.

Planning for closure is essential to ensuring the sustainability of the project. One tool that can be used to guide the way in which sustainability is approached is the Transition Planning Matrix. This tool outlines the questions, principles, and challenges that the project manager, team, and stakeholders (including governance structure), need to consider when planning for the closure of the project.

Component	Key Questions	Guiding Principles	Challenges
1. Plan for closure from earliest project phases	What type of closure is envisioned? What is the timeline and what are benchmarks?	Ongoing project review and revision Transparency; especially funding	Balancing firm commitments with flexibility Allowing adequate time to develop capacity
2. Develop partnerships and local linkages	Selecting the right partners? What do partners bring?	Diversity: may need other project inputs Clear and common goals	Aligning needs and objectives of diverse stakeholders Supporting local partners
3. Build local organizational and human capacity	What capacities are needed? What capacities exist?	Build on existing capacity if possible Create environments to support capacities	Designing monitoring to track capacity building Providing incentives and retaining experienced staff
4. Mobilize local and external resources	What inputs are needed to maintain services? Can benefits be sustained without ongoing inputs?	Procure resources locally where possible Increasingly bring external resources under local control	Difficulty finding adequate or available local resources Other funders not 'buying-in' to original objectives
5. Stagger phase out of various activities	What are key project elements? Which elements are dependent on others?	Flexibility; staggering sequence may change upon implementation	Sufficient time allowed in the project cycle to start seeing the intended impact and outcomes
6. Allow roles and relationships to evolve after transition	What types of ongoing support (advice, mentoring, Technical Assistance, etc.)? How will ongoing support be funded?	Prevent slippage of project's intended results by including in extended, expanded or redesigned project	Availability of funding for ongoing support Availability of staff who can focus sufficient time and energy on ongoing support

Table 33: Transition Planning Matrix

Closure Planning

Comprehensive project plans need to include a project closure plan that describes how a project intends to evolve upon completion of the project. A closure plan may include several scenarios or contingencies that address risks and may also allocate additional resources when it may not be possible to exit entirely and include the specific actions that need to be taken to ensure that the project closure process is as efficient and compliant as possible.

- **Evaluations:** The type, timeframe, and resources for conducting evaluations.
- **Reporting Requirements:** When and in what format will reports need to be provided, including financial and narrative reports.

- **Closure Activities:** Contractual, financial, and administrative activities that ensure that all project elements have been conducted.
- **Handover Activities:** If the project is being handed over to another international NGO or local organization or entity, ensuring sufficient time and resources throughout the project to ensure an efficient handover.

These procedures should be planned for as part of the project schedule planning process as part of the project scope of work, incorporating the resources and timeframe required to complete all activities.

Reflections on Project Planning

Planning, planning, and more planning. You are going to plan for the plan, and then re-plan the plan again. As a project manager, you are a planning machine! The success of your project is hinges on your ability to plan in a participatory, comprehensive, and iterative way.

A lot of the initial work was done in Identification and Definition and Setup, establishing a foundation for the planning process by developing high-level estimates and analyses. Don't underestimate the importance of these processes and procedures that are done early in the project lifecycle. They can be critical to speeding up the process of planning and lay a solid foundation from which to start.

Just a quick word about decision gates as well – guess what? Plan for them. Have decision gates planned for at specific points in the project so that the living processes and documents can be reviewed, updated, and the project justified. There may be times when decision gates need to happen that aren't planned, and that is ok too. However, if they aren't planned for, they likely won't happen.

2.4 Project Implementation

What We Cover in this Chapter:

- ✓ Managing people
- ✓ Managing the project schedule
- ✓ Managing the project budget
- ✓ MEAL activities during implementation
- ✓ Managing the supply chain
- ✓ Managing issues
- ✓ Change management in projects

> "Management is, above all, a practice where art, science, and craft meet."
>
> – Henry Mintzberg

2.4.1 Introduction

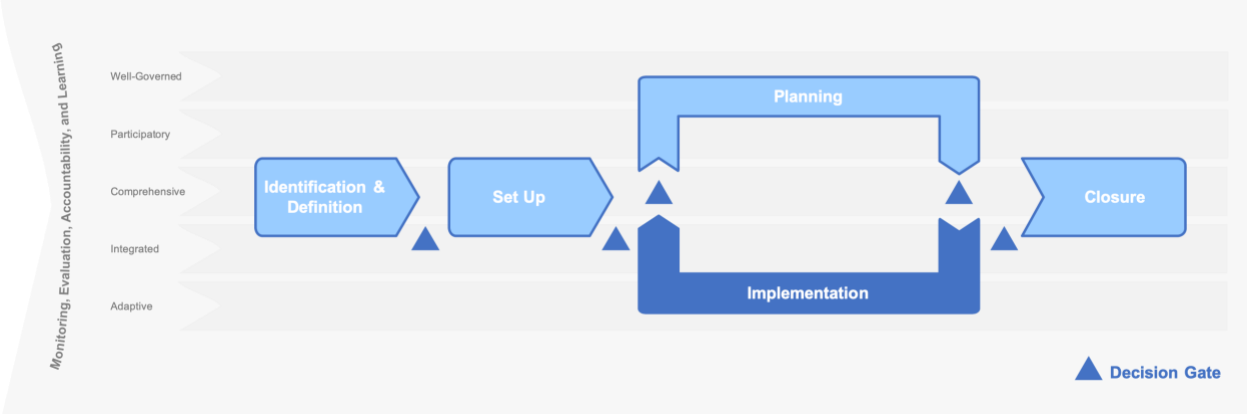


Figure 39: Project DPro Phase Model – Implementation

The Implementation phase of a project is usually the most intense, requiring that the project manager oversees all elements of the project to make sure that it is delivered on time, on budget, within scope, and with the highest quality product or service possible. This juggling act of managing the Triple Constraint Triangle, risks, and issues can be incredibly daunting, which is why it is so important the project manager has all of the processes, tools, and plans in place prior to the start of implementation.

Stakeholders and people management will be critical during this phase. At this point, you should have completed a comprehensive stakeholder analysis as well as a communication plan and stakeholder engagement strategy. You should also have a human resource plan in place. These plans and strategies will provide a solid foundation, in the Implementation phase, for which the project manager and team can involve relevant stakeholders at appropriate times throughout the project. These plans and strategies will also ensure that your project incorporates the participatory principle.

2.4.2 Key Outputs

Issue Log: The Issue Log is the tool used to track all of the issues in the project, alerting the project manager to unresolved decisions, situations, or problems that could prevent the project from being delivered on time, budget, within scope, and at a high quality.

Monitoring Reports: One of the most useful tools the project manager will have during the Implementation phase is the monitoring reports. These reports provide the project manager with essential information as to if the project is scheduled to achieve the targets by the end of the project.

Evaluations: If the project is longer term or particularly complex, a real-time evaluation may be conducted to ensure that the right project is being done in the right way to achieve the outputs and outcomes at the end of the project. Real-time evaluations are learning focused, providing insight into what went well and what needs to be improved for the remaining timeframe of implementation.

Narrative and Financial Reports: Depending on donors, organizational, and/or program requirements, reporting will be a part of the implementation of the project. Narrative reports normally outline the progress that the project has made, describes any issues that have happened, and communicates the progress against the targets. Depending on the donor, there may be additional components required for narrative reporting so it is always good to check donor and funder compliance.

Reporting During Implementation

Reporting is often perceived as something that is done for compliance purposes with stakeholders and donors and this is certainly the case. However, quality reporting is also part of accountability and transparency in the project.

Reporting should include all required information, be clearly written, submitted according to the agreed upon deadlines, and include any relevant supporting documents.

Financial reports provide information on the spend (burn) rate of the project, forecasts and projections, as well as any supporting documentation that will be required. The reporting should have been included as part of the project scope of work and planned for accordingly in the Planning phase.

Stage Plans: In Setup, a stage map was developed and in Planning a detailed plan was developed for the initial stage of the project. As you go through the implementation of the project, additional stage plans will be created as they approach, detailing the work that is to be completed in each subsequent stage after a decision gate process has been conducted regarding the previous stage, context, risks, and issues that occurred.

Updated Risk Plan: In Planning, the risk plan and register should be reviewed and updated, possibly multiple times, depending on the length and complexity of the process.

2.4.3 Who is Involved in this Phase

Well, EVERYONE! In all reality, there will be involvement from the project team, the governance, the program manager, and most other stakeholders during this phase. The project manager will be doing a lot of people and stakeholder management and communication during this phase.

Stakeholder engagement plans and communication strategies will provide guidance on whom to involve and when. The implementation plan should also outline who will be doing the tasks – using the RACI – and who is accountable, needs to be consulted and informed.

Governance and program managers will be involved in decisions that are above the tolerances of the project manager in this phase. They may also be part of the decision gate and stage planning processes, providing insight into the bigger picture under which the project fits.

2.4.4 What Does this Mean in Practice

Rolling-Wave Planning: The iterative process of adding more detail to the implementation plan as the project goes through implementation is called rolling-wave planning. Rarely, if ever, is a project plan 100% correct from the start. This would suggest a perfect implementing environment, which none of us operate in. Rolling-Wave Planning is a great tool to use to ensure that the Implementation Plan stays adaptable and relevant to the context the project is operating in. Stage planning is one of the tools that can be used for rolling-wave planning.

Decision gates: An adaptive tool, Decision gates provide the opportunity for project team members and stakeholders to review and justify that the project should move forward as is, if changes need to be made, or if the project needs to be stopped altogether. Employing a formal Decision gate process during the Implementation phase will provide the opportunity for project stakeholders to reflect and make decisions to ensure that the right project is still being done in the right way. These could take the form of regular review meetings with members of the project team, program manager, and stakeholders in which information from the MEAL team, risk registers, financial status, and issue logs are reviewed and updated.

2.4.5 Inputs

The primary document you will need during the Implementation phase is the implementation plan. The purpose of the implementation plan is to guide the project team during the implementation phase. Subsidiary plans, such as those listed below, will also be helpful during the implementation of the project.

- Comprehensive Risk Plan
- MEAL Plan
- Human Resource and Management Plan
- Stakeholder Engagement and Communications Plan
- Any other subsidiary plans that will be useful

2.4.6 Processes

Managing People

People make projects. Project managers work in teams and often are only able to achieve their goals as a result of the commitment, cooperation, and contributions of the people on the project team. As a result, managing people can become the project manager's most important, and most difficult, job.

Project DPro Competency Model

A great tool to use to gauge your competencies in the various areas is the Project DPro Competency Model which can be found in Annex I.

Most often, when we think of project managers who are especially talented at managing people, we tend to focus on their mastery of "art" of people management. These are the project managers who are effective at motivating team members, communicating vision, empowering staff, recognizing achievements, listening, leading by example, resolving conflicts and building trust.

All of these "art skills" are related to the leadership/interpersonal competency of the project manager and are extremely important to project success. Therefore, project managers should strive to enhance their capacity to lead, motivate, inspire, mediate, communicate and encourage.

This does not mean, however, that there are no "science" skills involved in people management. Being able to know which project management tools to use and when, identify and manage variances, develop comprehensive plans are all technical project management skills required to bring about the outputs and outcomes of projects. The success of a project requires that the project manager has a balance of art and science. In the Introduction, we discussed the competencies for project managers

- **Developing the Project Team** – What skills are needed? What are the capacity-building needs? Are there certification requirements? Developing project staff can be challenging, particularly if there are high turnover, limited human resources for the project, or team members who are working on multiple projects. However, developing the project staff will serve several purposes and needs to be considered before the project gets into full implementation mode. For example, developing the project team will:
    1. Ensure that they have the skills and tools required to more effectively implement the project.
    2. Provide team members with incentives to stay with the project or organization by demonstrating that the project or organization is investing in their development.
    3. Generally, build individual and institutional capacity.
- **Conducting Performance Assessments** – The project manager should be aware of the organizational procedures for conducting performance assessments with project team members and follow those procedures. Performance assessments are the documented formal or informal assessment of the project team members' performance. After analyzing the information, project managers can identify and resolve problems, reduce conflicts, and improve overall team work.
- **Maintaining Team Communication Norms** – As the leader of the project team, the project manager must make sure that there is a steady and proactive flow of information and communication (via meetings, workshops, reports, memos, newsletters, blogs, etc.). Developing a culture of communication within the project team allows them to share information, actively work to identify issues and conflicts, and interact creatively to resolve issues, contributing to a more efficient project environment.

Managing the Project Schedule

Project managers should monitor their schedules, according to what was detailed in the implementation plan, regularly to ensure the project schedule remains on track. If the project schedule begins to vary, the project team will have a number of options to get the project back on track. For example, deadlines can be adjusted or the scope of the project can be reduced.

However, if the project schedules are fixed and the project scope cannot be changed, it may not be possible for the project to get back on track through the typical schedule management techniques. As an

alternative, in scenarios where the scope and schedule are inflexible, two alternative techniques to consider are fast tracking and crashing.

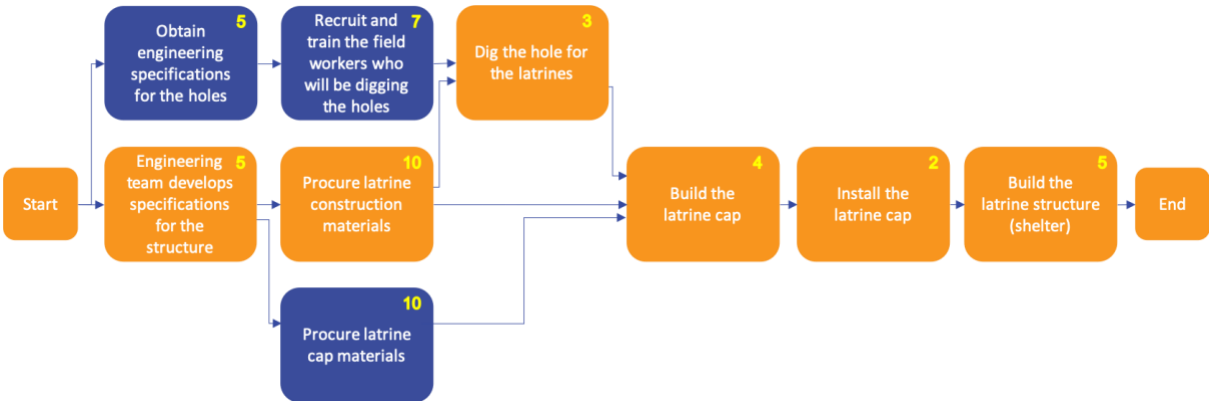


Figure 40: Network Diagram for the Delta River Project Latrines Component

"**Fast tracking**" a project schedule involves taking activities that would normally be completed in sequence and instead completing them in parallel. To make the most of fast-tracking, project teams should target the tasks on the critical path first, as the activities on the critical path provide the greatest potential to accelerate the overall project schedule.

For instance, in the network diagram for the latrine construction project, the original plan was for the building of the latrine cap to take place AFTER the latrine hole digging. In the fast-tracking scenario (Figure 41), the network diagram has been adjusted so that the latrine cap is now built at the same time as the digging of the holes. By completing activities in parallel, the critical path of the project is reduced from the original 29 days to 26 days, thereby allowing the project to make up for lost time.

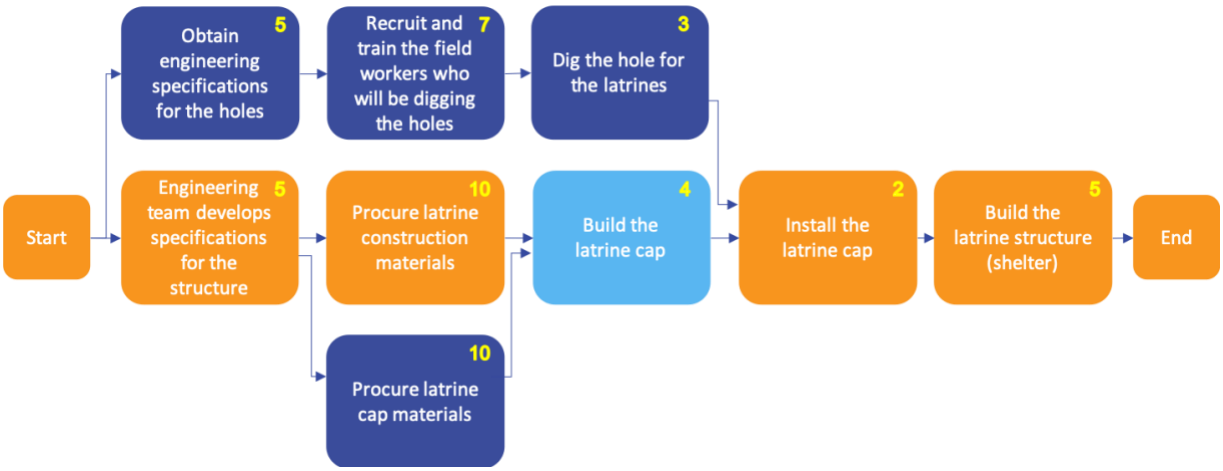


Figure 41: Fast Tracking the Latrine Project Schedule

"**Crashing**" the schedule means adding additional resources to the critical path to accelerate progress, however, without necessarily getting the highest level of efficiency. For instance, let's say that the original plan for the latrine project had one person working 14 days to dig a hole. To crash this timeframe, one option would be to add a second person to the hole digging activity. This will most probably increase the speed at which the hole digging activity is completed. However, don't assume that doubling resources will double productivity. Often, the additional productivity of the second resource is

lower. The lower productivity of marginal resources can result from a variety of reasons. For example, there might not be enough room in the hole for two people to work efficiently or the project might not have the excavation materials (shovels, buckets, picks, rope, etc.) to support the work of two diggers.

In the case of the latrine project, adding a second digger to the excavation team reduces the time spent on the hole digging activity from 3 days to 1 day. Therefore, as a result of crashing the project, the critical path is reduced from 29 days to 27 days.

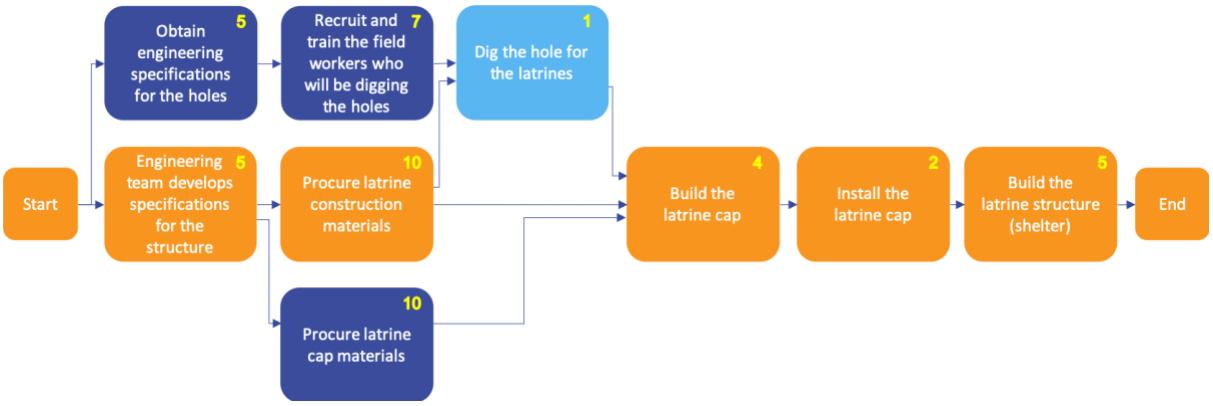


Figure 42: Crashing the Latrine Project Schedule

Managing the Budget

Development and humanitarian sector organizations usually rely on individual or organizational donors to fund programs – and they expect funds to be well managed. Development and humanitarian organizations also have an obligation to the communities and partners they serve, being responsible to ensure that resources obtained on their behalf are used in an optimal manner in order to maximize impact.

To exercise prudent financial management of the project, the project manager will need to develop skills in these three areas:

- Developing Budgets
- Identifying Cost Estimates
- Monitoring Budgets and Expenditures

In some cases, a project manager may not be given full control over all financial processes. To be successful, a project manager will need to collaborate and coordinate closely with a Finance Manager (and Supply Chain team in many cases) plus an array of other people in all steps of the finance management process. Even if there are elements of financial management in which the project manager lacks full authority and control over processes, the project manager is still accountable. These six areas of coordination and collaboration in finance are especially critical:

1. Compiling project expenditure information
2. Gathering information and understanding and budget variances
3. Managing payments
4. Authorizing expenditures
5. Managing cash flow, spending, forecasting, and expenditures
6. Overseeing purchasing procedures

As discussed previously, the mandate of the project manager is to assume responsibility for ensuring overall success of the project. In the financial elements of a project, the project manager needs to make sure that roles and responsibilities of all individuals involved in financial processes are clear AND that individuals are living up to their commitments.

When monitoring project financial performance, the first question is usually, "Is the project over or under budget?" To answer this question, most project teams pull out the most recent budget data and compare the Cumulative Planned Costs to the Cumulative Actual Costs for the project up to a certain date. Unfortunately, this calculation is often limited in its usefulness. While it might provide a snapshot of whether a project has spent more or less money than was estimated over a given period, it provides no data to explain why any variance might exist.

Take, for example, the data provided in Table 34. The initial analysis of the data from month three of this project would indicate that this project is over budget. This is because the Planned Cumulative Cost at the end of month three (1100) is lower than the Actual Cumulative Cost (1300).

Task	Planned Cost	Month One	Month Two	Month Three	Month Four	Month Five	Month Six
A	100	100					
B	200		200				
C	100		100				
D	400			400			
E	100			100			
F	200			200			
G	200				200		
H	100				100		
I	300					300	
J	100						100
Planned total cost per month		100	300	700	300	300	100
Planned cumulative cost		100	400	1,100	1,400	1,700	1,800
Actual total cost per month		150	350	800			
Actual cumulative cost		150	500	1,300			

Table 34: Illustrative Budget for a Six-Month Project (including actual costs through Month 3)

Unfortunately, this quick calculation doesn't give the whole picture of the financial status of the project. Yes, the project has spent 200 (11%) more than was budgeted for the first three months of the project. However, while it is tempting to assume that the cost variance at the end of month three means that the project is "over budget"; be careful not to jump to assumptions! The higher than expected costs could be attributable to one of two reasons:

- **Scenario A**: The project could be more expensive than was originally estimated. In this case, project activities are on schedule, but they cost more than anticipated in the budget. Analysis: Scenario A is definitely problematic. It points to a trend that, if continued, will result in a project that will be over budget. In this situation, corrective action will need to take place to ensure that the project avoids budget shortfalls.
- **Scenario B**: The project might be spending more than it expected because the project is ahead of schedule. As a result, the project is spending more than they anticipated in the first three months of the project. Analysis: Scenario B is not necessarily problematic. Yes, the project in Scenario B is spending more money per month than was originally planned; however, it is also completing more work than it had planned. In this scenario, the project needs to collect more information to decide whether the project is spending more money than it had anticipated for the amount of work it is completing.

  Note: In both scenarios, the project will need to ensure it has enough cash on hand (cash flow) to continue operations because it is spending more money per month than was originally anticipated.

Scenario B provides an interesting challenge to a project team. This scenario underscores the important message that it is not enough to look only at whether a budget has spent more or less money than was estimated over a given period. Instead, monitoring financial performance must also watch two separate but related indicators: monitoring cash flow and monitoring costs through earned value analysis.

To best monitor project costs, it is preferable to monitor the cost of the work completed during a period. **Earned Value Analysis is a tool that compares the planned and actual cost for each task that has been performed and ALSO compares the rate of progress on each task to what was scheduled in the project plan**. This means that in order to conduct Earned Value Analysis the project manager will need a more complete set of data that combines elements of both the project budget AND the project schedule in the implementation plan.

Table 35 provides an updated view of the six-month project introduced earlier, but now includes two new columns that provide the actual cost of each task and the percentage of work completed for each task.

Task	Planned Cost	Actual Cost	% Done	Month One	Month Two	Month Three	Month Four	Month Five	Month Six
A	100	150	100%	150/100					
B	200	200	100%		200/200				
C	100	100	100%		100/100				
D	400	400	100%			400/400			
E	100		0%			0/100			
F	200	100	50%			100/200			
G	200	200	100%			200/0	200		
H	100	50	50%		50/0		100		
I	300	100	50%			100/0		300	
J	100		0%						100
Planned total cost per month				100	300	700	300	300	100
Planned cumulative cost				100	400	1,100	1,400	1,700	1,800
Actual total cost per month				150	350	800			
Actual cumulative cost				150	500	1,300			

Table 35: Example of a 6-Month Project Budget (including data for Earned Value Analysis)

When analyzing the information in Table 35, there are two important conclusions to be drawn from the data:

- After three months, the project has either fully or partially completed eight tasks. By comparing the planned costs of each of these tasks with the actual cost of performance of these tasks, it can be shown that the project is EXACTLY on budget when compared to the work performed (the project spent 1300 to get 1300 worth of work done).

- The project plan calls for 1100 worth of work to be accomplished in three months. Instead, 1300 was accomplished. That means the project is 18% ahead of schedule.

So what conclusions can be derived from this analysis?

- If the project continues at the current rate work, it will complete early;
- If the project trends continue unchanged, the project will complete on budget.

Note that the conclusions of the Earned Value Analysis differ from the conclusions of the cumulative cost variance analysis in the previous section. This is because the Earned Value Analysis is providing richer data that integrates scope, budget and calendar data at the activity level of the project.

As a result, Earned Value Analysis helps underscore that not all scenarios where the cumulative costs exceed the project budget are "bad." Conversely, not all scenarios where a project's cumulative costs are under budget are "good." The project manager should explore further to get a clearer understanding of the budget situation in comparison to the scheduled completion of project deliverables.

Table 36 provides an overview of the combinations of results that can occur when conducting Earned Value Analysis and identifies the implication of the different scenarios. Note that the cells of the table provide some budget/schedule combinations that are "good", others that are "bad" and some that require more data to understand the project status.

	Behind Schedule	On Schedule	Ahead of Schedule
Under Budget	Need more data	Good	Good
On Budget	Bad	Good	Good
Over Budget	Bad	Bad	Need more data

Table 36: Results Combinations for Earned Value Analysis

While the status classifications in Table 36 are helpful, they should be a launching point for exploring further: "Why is our current Earned Value Analysis status what it is? Is our current status a result of decisions the project has made regarding quality management, risk management, stakeholder management or any of the many other topics that influence the budget and the calendar?"

As we conclude this exploration of financial monitoring, there is one final observation that is important to highlight. While Earned Value Analysis can provide rich data that helps better project financial status monitoring, it also requires an accurate project accounting system that integrates activity-based cost and schedule data. Together, this data can be used to calculate earned value measurements for the project's overall cost and schedule performance. The accounting system will need to be founded upon a practical, activity-driven work breakdown structure and will need to include timely cost information. Any delay in cost reporting is a delay in the ability to assess the current cost and schedule status of the project. These prerequisites are often absent from the systems of development organizations, making it difficult to adopt this management tool within the context of development projects.

Managing Risks

During the Implementation phase, you will be continually monitoring risks to identify any change in their status, or if they turn into an issue. It is best to hold regular risk reviews throughout this phase to identify actions outstanding, risk probability and impact, remove risks that have passed, and identify **new** risks.

The Risk Register was developed in the Project Setup phase and should have been updated and reviewed throughout the Planning phase. During the implementation of the project, the risk register needs to be reviewed and updated at agreed upon points throughout the project. The list of risks and associated risk management response strategies will likely change as the project matures and new risks develop or anticipated risks disappear. Regularly scheduled project risk reviews can be used to ensure that project risk is an agenda item at all project management meetings. If unanticipated risks emerge or a risk's impact is greater than expected, the planned response or risk allocation may not be adequate. At this point, the project team must perform additional response planning to control the risk.

Managing Issues

In the boxing world, the saying goes that "everybody has a plan... until you get hit." The same dynamic exists when managing a project. Just like a boxer in the ring, the life of a project is risky, complex, and sometimes just plain messy. Even with a comprehensive and detailed plan, there will be "punches" (issues) that challenge the project during its implementation. Like any good boxer, the project manager must learn how to manage the issues, navigate the complexity, and adapt the plan to reflect the most recent reality.

An issue is an unresolved decision, situation or problem that will significantly impact the project and that the project team cannot immediately resolve. Issues management consists of having a process for identifying these problems and managing them until they are resolved. Resolving issues may be beyond the authority of the project manager and team. However, even if an issue needs to be escalated to the next level or delegated to another person to resolve, it still needs to be tracked by the project manager. The project manager needs to be ready throughout the Project Implementation phase to apply resources to address and resolve these issues.

Issues Management should be done collaboratively, including all team members – especially those on the ground doing the work. While the project manager should not directly be responsible for taking action on every issue, she or he ought to be well informed about the issues and escalate those issues to the project governance if they fall above the tolerance levels. The collaborative, team effort in managing issues will require the team to:

- Identify project issues;
- Contribute to the resolution of project issues (Note: experience has shown that the people closest to the work usually know best how to resolve issues. Therefore, it is the job of the project manager to establish an environment in which each team member is in a position to resolve as many issues as possible at their level and understand their tolerances to make decisions and respond to risks. Clear governance structures and tolerances and key for efficient issues management);
- Escalate important issues (that are above their tolerances) to the project manager as soon as possible.

Nevertheless, while issue management is a collaborative endeavor, the project manager is ultimately accountable for issue management (remember that in a RACI chart there is only one individual accountable for a given task/activity).

Having a well-documented issue management process is crucial to communicating and enforcing that process across the team. If issues are not resolved, the negative consequences can include the following:

- Inability to meet project timelines, cost, and schedule;
- Poor or unacceptable project quality;
- Poor reputation among communities, donors and others; and
- Post implementation disputes.

The project manager needs to manage all issue management processes and can do this through the following:

1. **Issue Identification and Tracking** – Identifying outstanding questions, decisions and other problems before they adversely affect the project. As such, the issue identification and tracking process are closely related to the topic of risk management and to the monitoring of the project.
2. **Issue Analysis** – Understanding the issue sufficiently to consider future consequences of action plans designed to resolve it.
3. **Issue Communication** – Communicating issues to the right level of the organization to get them resolved. Furthermore, it is important to communicate when and how issues are resolved.
4. **Issue Control** – The project manager is responsible for establishing an environment where the project team and implementing partners can carry out actions to ensure issues are resolved in a timely and effective manner.

The issue control process is closely related to project monitoring, evaluation, accountability, and learning activities and should include establishing and tracking a plan for getting issues resolved. Issues are also closely linked to change control in the project. Changes often occur as a result of issues, so these management processes go hand-in-hand.

The most important control tool is the issues log, which summarizes the issues, describes their current status and identifies who is responsible for addressing the issue. The issues log can take on a variety of technical forms from paper to a fully integrated database. A sample format can be found in the issue log table below:

Issue Reference	Reported by	Description	Date Reported	Assigned to	Date Assigned	Status	Resolution
Activity Delay: Latrine Construction	**Site Supervisor**	**Rain has delayed the digging of holes for the latrines.**	**21 March**	**Site Supervisor**	**23 March**	**23 March:** digging of the holes for latrines is delayed because of rain which started on 21 March, activities have been suspended until rain stops. **24 March:** Rain is still delaying activities. **25 March:** Rain has stopped but the ground is too wet to resume digging activities. **26 March:** Ground is still too wet to resume digging activities, will check again after the weekend. **29 March:** Ground is dry enough to resume activities.	Number of days delayed is above the tolerance level of the site supervisor (5 days) so the issue has been escalated to the project manager. Project manager is acquiring additional workers to crash the schedule.

Table 37: Issues Log

Keep in mind that managing issues requires that the entire team is aware of the processes in place and understand what their tolerances are to make decisions regarding issues. It is also critical that the project team communicates the issues to the project manager in all cases.

Monitoring, Evaluation, Accountability, and Learning (MEAL)

During implementation, a substantial amount of monitoring, accountability, and learning will be completed. The frequency of evaluation will depend on the length of the project, requirements from donors, and complexity of the project. The MEAL activities during implementation are vital to maintaining and managing the triple constraint triangle. The project manager needs to work closely with the MEAL team (or focal point) to provide timely and relevant information on the progress of the project as well as incorporate mechanisms that will give stakeholders the opportunity to provide feedback and ensure there are intentional learning processes included into the project.

Monitoring

Monitoring should be conducted throughout the entire life of the project but is especially important during the implementation because it is used to inform decision-making, ensures that the project is on track according to the planned targets, and can identify risks and issues that have not been brought to the attention of the project manager and team.

Indicators from the logical frame will be used to measure the progress toward targets as the project moves through implementation, ensuring that they are being achieved according to the plan.

For this, the project manager and MEAL team may use an **indicator performance tracking table (IPTT)** that includes all the indicators of the project, the frequency they are measures, the targets to be achieved, as well as baseline and endline values.

Indicator Level	Indicator and Definition	Overall Target	Baseline Value	Target Q1	Actual Q1	Target Q2	Actual Q2	Endline Value
Outcome: Improved access to quality latrines for the Delta River Community	% increase in the use of latrines by the end of the project in comparison with before the project. (disaggregated by gender)	60%	18% (6% female, 12% male)	30%	23%	50%	48%	
Output: Quality latrines constructed.	# of latrines constructed within 50 meters of households by the end of phase 2 of the project.	100	0	50	35	50	58	

Table 38: Indicator performance tracking table

As demonstrated in the IPTT, the targets for each indicator are divided into periods of time. This table provides a way for the project manager and MEAL team to identify the variances between the plan and the actual and provides valuable information for consideration to be made regarding the implementation plan and examine if/why these variances are occurring.

Take a look at the two examples in the IPTT, according to the plan, there were to be 100 latrines constructed by the end of the quarter (Q) two, with 50 constructed in Q1 and 50 in Q2. As demonstrated in the actual columns, only 35 were constructed in Q1 and 58 constructed in Q2, totaling 93 which is a variance 7 latrines under what was planned (100). The project manager and MEAL team will have been alerted after Q1 that the target was not being met and will have investigated the causes for the failure to meet the target. If you take a look at the Issue Log above, we can see that rain was the cause of the delay in the Q1 of the project and the project manager added more resources to try to catch up with the total targeted number by the end of the Q2.

The delay in the output level activity (fewer latrines constructed by the end of Q1) had a detrimental effect on the outcome level indicator, which required latrines to be built in order for people to start using them and thus demonstrating an increase in use of latrines. This example highlights how issues, MEAL, and schedule management are so integrally linked.

The IPTT is just one of the many tools that the MEAL team and project manager can use to monitor the project. Regardless of the tools used, they should be reviewed and updated regularly so that the project manager and other stakeholders (e.g., governance) have the ability to use the information from the monitoring to inform decision-making in the project.

Evaluation

During implementation, real-time evaluations may be a very valuable tool for the project manager to use, providing the opportunity for more in-depth analyses to be conducted during the project. The purpose of a real-time evaluation is to provide the project manager, team, and stakeholders with an overall examination of the project for improvement and learning so that adjustments can be made to the project if necessary.

If conducting a real-time evaluation, the timing and resources required should have been planned for during the Planning phase.

Accountability

Accountability encompasses four primary components: transparency, standardization, responsiveness, and participation. In essence, accountability aims to commit to, respond to, and balance the needs of stakeholders in a project.

A lot of reporting will be done during the implementation, this is one example of how the project can abide by the **transparency** component of accountability, providing information to stakeholders and sharing the progress of the project.

Standardization is directly related to compliance insofar as the assurance that the project is abiding by all rules, regulations, and standards for MEAL best practices.

As part of **responsiveness**, mechanisms ought to have been planned for and designed in previous phases. During implementation, these mechanisms will have been launched and the project team should be receiving feedback through these mechanisms. There should be a process for receiving the feedback in which the feedback is classified and provided to the appropriate team member. For example, if you are using a comment box in a healthcare center where patients can provide feedback, there should be regular times when that feedback is collected (twice weekly, weekly), documented, classified, and forwarded to the right team member for action or response.

Participation has been a theme throughout the Project DPro and this theme continues in the MEAL activities as well. Ensuring that stakeholders are included in the process – when and where appropriate – promotes buy-in for the project as well as accountability and transparency. The challenging part is to understand which stakeholders should be included in which activities to promote a more participatory culture within the project.

Learning

Intentional learning should be done throughout the project, particularly during the implementation. During Planning, learning should have been integrated into the MEAL plan, establishing points in the project where the team and relevant stakeholders pause and reflect on the information that has been received through the monitoring, accountability, issues, etc.

Learning should be participatory, documented, and shared with stakeholders. It is also important that the lessons learned get fed up to the program and portfolio levels.

Managing Change

When reflecting on evolution, Charles Darwin observed that 'it is not the strongest of the species that survive, nor the most intelligent, but the ones most responsive to change.' Similarly, project managers must also acknowledge that change will frequently, or nearly always, be required for their projects to succeed.

These changes are normal, acceptable and (at times) even desirable. Project plans are not intended to be static documents and care must be taken to ensure they are not considered to be static, or excessively difficult to change. Project teams need to remember that an implementation plan is a "means to an end", it is not an end in itself! More specifically, the team needs to recognize the pitfalls that exist when project plans are treated as static documents, including:

- A failure to recognize that the original plans are flawed;
- A fear of acknowledging to external (and internal) donors that the original plan is no longer workable;
- An unwillingness to revisit the original documents to develop a new and more appropriate plan; and
- A lack of clarity with regard to what process needs to be followed to update project documents.

However, when it comes to managing change requests, the project manager must balance two considerations. On the one hand, the project documents should not be considered to be unchangeable regardless of the changing project reality. On the other hand, care should be taken not to make changes to the project without going through the proper processes and channels.

To manage this balance, project managers need to establish norms that allow them to flexibly incorporate project changes when necessary, but they also need to make sure that proposed project changes are managed through a rigorous, integrated change control process that ensures that any project changes are:

a. Managed through a formal change management process;
b. Analyzed to ensure that implications of those changes are thoroughly thought through;
c. Documented to illustrate their complete impact on all the integrated elements of the project
d. Communicated to key project stakeholders.

Once it is clear what level of authority is required, per the project charter, to make decisions on a project change request, the next step is to answer the following additional questions:

- Is the change request allowable under existing agreements?
- Have the impacts of the change request on schedule, resources, costs and quality been explored and approved?
- Have project stakeholders been consulted with regard to the proposed change?
- Has the comprehensive and integrated project implementation plan been updated to document the implications of the proposed change?
- Are resources (time, materials, money, human resources) in place to implement the proposed change?

A change request map like the one presented in Figure 43 can provide a useful resource for identifying and controlling the process for managing changes to the project implementation plan and is part of the principle of adaptive project management. A Change Request Map is a process that the project manager, team, and stakeholders can use to ensure that changes are documented and their impact on the project (e.g., Triple Constraint Triangle) is assessed.

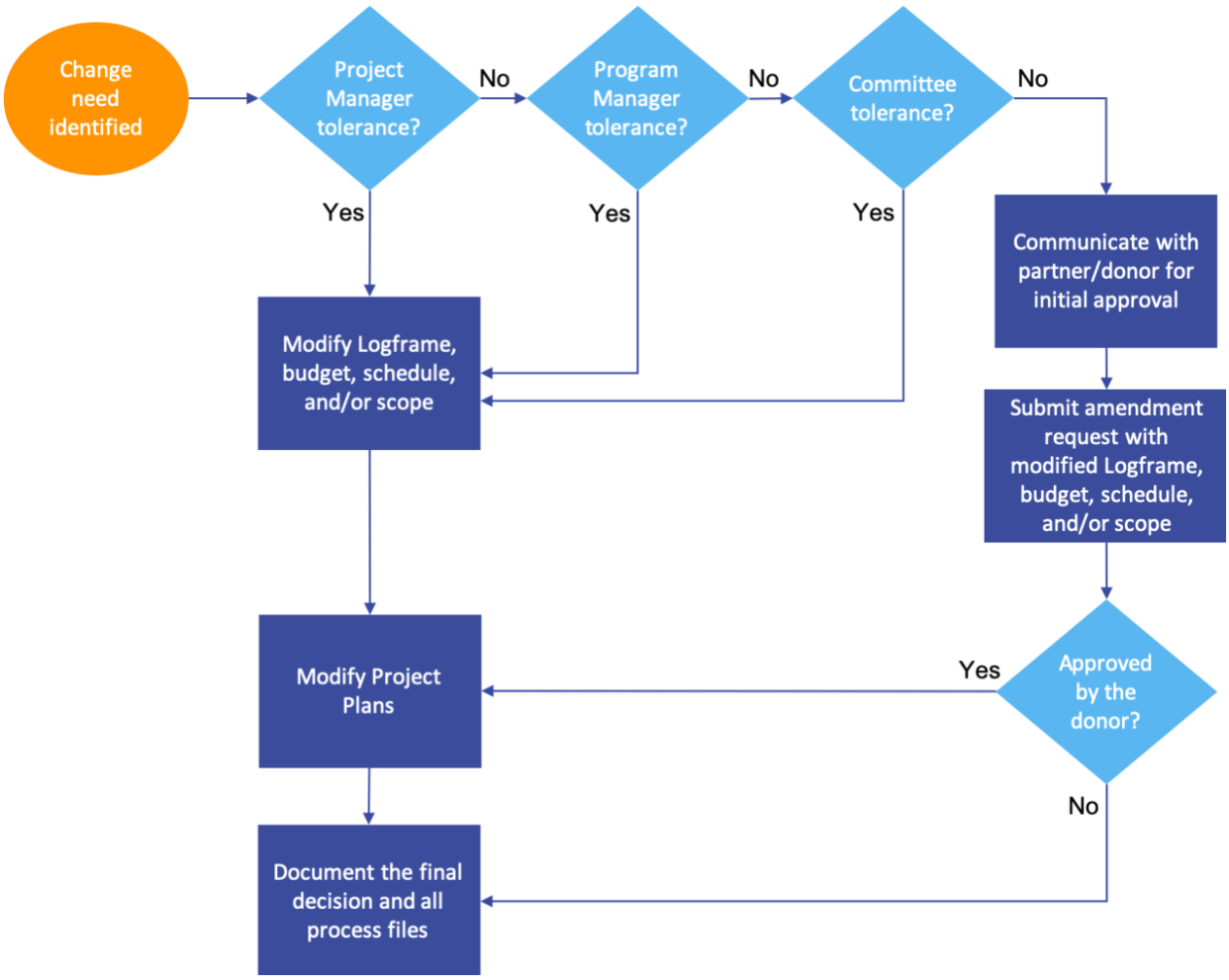


Figure 43: Illustrative Process Map for a Project Change Request

However, while a process map like the one in Figure 43 is helpful, it is extremely important to acknowledge that the process map for change requests will vary substantially depending on the project governance structure, donor relationships, contractual requirements, implementing partners and more. So, it is important to customize the process diagram to the reality of the projects' operating context.

Regardless of the specific process map for change requests, it is especially important that any changes be managed in an integrated way. That is to say, ensuring that any revisions to the project plan clearly identify the implications the change may have on other sections of the project management plan. People familiar with each of the areas of the project plan (scope, cost, schedule, risk, procurement, quality, etc.) will need to assess the impact of proposed changes on the **entire** project plan. When it is

agreed that the proposed change will be beneficial and that the implications are acceptable, the change request can be approved. Once approved, the revised project plan should be communicated to the entire project team, so that everyone now works to the updated plan.

Reality Check: Does this scenario sound familiar?

A three-year project has entered year two of its implementation phase. In general, the project is going OK. The logic of the project intervention is still valid, and the deliverables are still viable. There is, however, a significant problem with the project plan. The field reality of year two implementation has little in common with what was predicted when the project plans were developed 20 months earlier. It is increasingly clear that certain budget estimates were significantly underestimated, while other line items are no longer needed because of changes to the roles of implementing partners.

While these challenges can be addressed through a combination of issues management and change requests, some projects have addressed it through a strategy of iterative project planning.

Managing the Supply Chain

It is important to be clear that ultimate responsibility for project finance, supply chain and human resource management rests with the project manager. This is true even though the project manager may not have direct line management responsibility for supply chain team members. It is the project manager's job to make sure that project finances are well managed; that goods, services and materials are managed effectively and efficiently; and that project staff have all skills necessary to achieve success.

Procurement Management

Procurement includes the complete process of obtaining goods and services from preparation and processing of a requisition through to receipt and approval of the invoice for payment. The project manager may be responsible for the actual procurement of the services or products needed to develop and implement the project, or may be directing these activities through a contracting or procurement team leader. Regardless of the precise role and responsibility of the project manager, these procurement activities may have a significant impact on the project budget and schedule and should have been accounted for and included in the implementation plan. The supply chain functions should have been integrated into the implementation plan but will need to be monitored and possibly adjusted during the Implementation phase.

Examples of typical procurements associated with a project include:

- **Materials**: These may range from typical products such as furniture and personal computers, to highly specialized products for the project such as medical equipment, well-boring machinery, or road construction materials.
- **Consultants**: Frequently, while in-house resources are available to perform a significant amount of the project work, additional resources are needed to complete the project on time or to provide some needed skill. One strategy is to obtain outside resources, usually consultants, to augment the project staff.

- **Suppliers**: In this case, the supplier assumes responsibility for performing all aspects of a selected service, usually to specific standards and for a fixed cost. In this type of scenario, the project purchases the specific service. Examples might include demolition services, transportation services, security services, and construction services.

There are three steps in procurement management:

- Procurement plan updating and review
- Identification of providers
- Selection, negotiation and award.

Various procurement documents can be used to solicit information from potential providers of services and materials. Some examples may include:

- **Request for Estimates**: An independent estimate of the time and cost to provide the service or materials are generally provided when the evaluation criteria for selecting the provider is relatively simple and going to be decided primarily/exclusively by price.

  While price will be an especially important consideration when evaluating estimates, care should be taken to assess that the proposed cost is a realistic and not overly optimistic estimate that takes into consideration the technologies and skills involved in the project. If there are significant variations between cost and schedule estimates for materials and services in submitted estimates, the lowest estimate may not always be the best value. If the low bid is significantly lower than other estimates, it should be looked at very carefully as there may be a difference in the quality or something else that may be critical for the project team to know before accepting the estimate.

- **Request for Proposals**: When the selection criteria for potential providers are more complex, estimate documents will not necessarily collect all the information required to make an informed decision. These types of procurements may collect additional information via an Invitation for Bid (IFB) or a Request for Proposal (RFP) process. The RFP should contain a comprehensive and concise statement of work (SOW) that clearly defines the products desired, their functional requirements, operating and performance characteristics and required interfaces with other agency systems and processes.

The procurement process should be designed to enable the organization to obtain and evaluate estimates/proposals from a number of different providers, using a variety of criteria that might be relevant to the decision. During this process, keep in mind that the project team will need to comply with any donor compliance procedures related to procurement as well as organizational internal controls.

Selection criteria can be limited to price quotation and timeframe if the material or service is readily available and relatively simple in its configuration. Generally, however, provider selection will be based on a combination of financial and technical considerations.

Whatever selection criteria are employed, the decision-making group should be clear about the criteria to be used to make decisions and their relative weights. This understanding will inform their ultimate choice so as to facilitate easy assessment of responses.

Logistics Management

Since many projects are dependent on the timely delivery of materials, proper logistics support is an important necessity. Logistics means having the right thing, at the right place, at the right time. In its

most limited sense, logistics involves the transport of goods, but there is more to it than this. In a much wider sense, logistics includes all the activities required to deliver items accurately, efficiently and in a time-bound manner to the place and person it is meant to be sent. This wider definition of effective logistics involves:

- Inventory management and warehousing
- Materials transport

Depending on the project, inventory can represent a large cost of the total project value. This value is made up of the cost of the inventory itself, plus the cost of transporting the goods, cost of managing the goods (labor, packaging, etc.) and keeping the goods in warehouses. The project team needs to establish an inventory management that ensures that stock is available to meet the needs of the project as and when required.

To this end, the project manager must coordinate with the team members directly responsible for inventory management, constantly connecting the inventory requirements to the changing needs and priorities of the project. As part of this challenge, the project must establish a balance between supply and demand by establishing minimum holding stocks to cover lead-times.

As the project team establishes this balance, the project manager must ensure that appropriate policies are in place to establish the standards and controls for managing all elements of inventory control and warehousing.

The aim of transport is to physically move supplies in a reliable and safe manner, on time, cost effectively and efficiently to its destination.

A transport strategy not only depends on the needs of the project; it can also vary from situation to situation.

Asset Management

Project equipment and supplies are the property of the project. This often means that these assets are either returned after the closure of the project or allocated to another project for use. The project manager needs to make sure that there is an effective process for the management of assets during the Implementation phase so that these assets can be returned or reallocated once the project has finished. Assets management should include:

Recording Assets: Projects should maintain complete and accurate records of all fixed asset acquisitions. All assets acquired for the project (via purchase, transfer or donation) should be recorded.

Labeling Assets: Project assets should be labeled to facilitate their oversight and control. Any suitable labeling convention may be used as long as it is applied consistently and serves the purpose of monitoring assets.

Monitoring and Asset Records: Asset information should be updated on a regular basis to account for acquisition, adjustment, transfer and disposal information. This will include a physical count and discrepancies need to be investigated, understood and documented in the project issue log.

Safeguarding Assets: Establish adequate controls are in place so that fixed assets are properly maintained and safeguarded. These controls will vary depending on the asset and the risk. For example, an organization might require that computer laptops be secured with an appropriate locking cable and securely placed in a locked drawer or filing cabinet when not in use. Another example would be a requirement that office equipment on loan to staff members should always be recorded in the equipment log/loan records.

Project Sustainability Plan

Throughout the implementation of the project, particularly during the Decision gate processes, the sustainability plan of the project should be revisited and justified. There will be additional information available during the implementation that can be helpful in validating the sustainability plan. For example, you may receive feedback from the MEAL team (e.g., data and feedback from accountability mechanisms) or there may be something relevant to consider in the Issue Log. The project manager should ensure that the sustainability plan is still relevant and based upon evidence gathered throughout the project.

Some things to consider as you continue to justify the sustainability of the project:

- Is the way in which we plan to transition out of the project still valid and appropriate?
- If we will hand the project over, are we providing support and capacity to the entity that will take over?
- Has the context changed? Is the sustainability plan still viable?

If using stage plans, the decision gates that are present at the end of each stage are good points to continuously check the viability and relevance of the sustainability plan. If stage plans are not used, the project manager will need to establish points in the implementation of the project in which the sustainability plan is reviewed and adjusted as necessary.

Reflections on Project Implementation – Steering the Project to Success

A lot of time, energy, and resources are spent in implementation. This is also where most issues happen which can directly affect your ability to deliver your project on time, within budget, scope, and quality. The way the implementation goes is a direct result of how well you identified, setup, and planned for the project. A lot of issues can be tied directly back to poor planning, whether that be a scope of work that isn't comprehensive, or a plan that didn't include the right stakeholders therefore affecting the estimates leading to a lot of stress, realignment, and justification writing during the implementation.

The project manager is like the captain of a ship, steering all crew members and activities to ensure that the cargo arrives to the destination intact. While there will certainly be things that happen out of the control of the project manager, there are a lot of scenarios that can be avoided if processes in previous phases are done comprehensively, in a participatory way, and are revisited throughout the implementation to ensure that the project is still being done in the right way.

Governance becomes really key in this phase as well. Issues often lead to change, change often leads to decisions that have to be made. If the governance structure is clear, this will expedite the decision-making process and provide clarity to implementing partners, the project manager, and team on which decisions they can take and when.

Essentially, implementation can be messy, but if you do the work needed to properly setup and plan for the project before the implementation starts, you will improve your abilities to do the project in the right way.

2.5 Project Closure

What We Cover in this Chapter:

- ✓ Project closure scenarios
- ✓ Administrative, financial, and contractual closure
- ✓ Sustainability planning
- ✓ Project evaluations
- ✓ Project reporting
- ✓ Lessons learned and after-action reviews.

"All things are created twice; first mentally then physically. The key to creativity is to begin with the end in mind, with a vision and blueprint for the desired results."

– Stephen Covey

2.5.1 Introduction

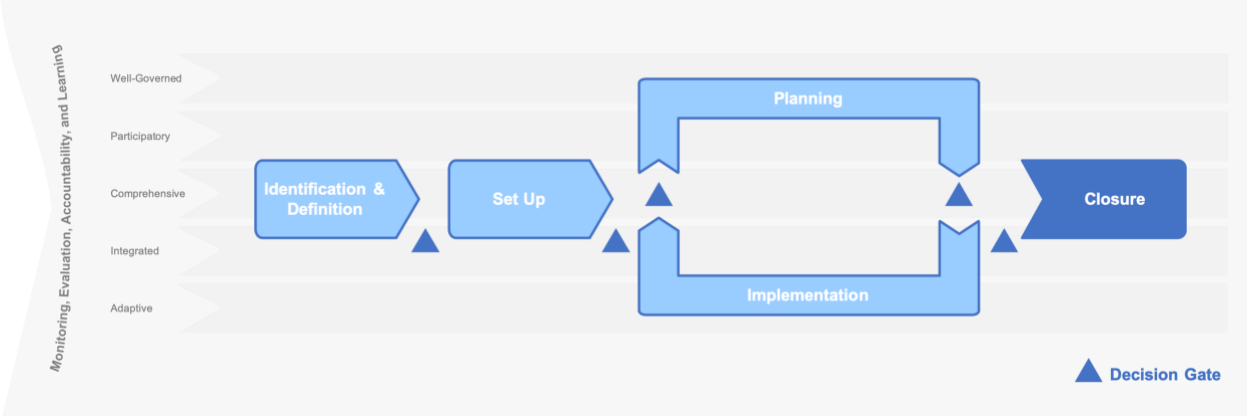


Figure 44: Project DPro Phase Model – Closure

A project, by definition, is a temporary endeavor, having a defined beginning and end (usually constrained by date, but possibly by funding or deliverables). The temporary nature of projects differentiates them from normal business operations of an organization (or 'ongoing business as usual, which is repetitive, permanent or semi-permanent functional work producing products or services). In the development and humanitarian sectors, however, one often finds projects that have been in operation for years – with one phase of the project continuing the work of the previous phases. This observation underscores the reality that the end of a project in the development sector is often more accurately characterized as a transition phase rather than as a strictly defined project closure.

As mentioned in the discussion of the project Planning phase, comprehensive project plans need to include a project closure plan which describes how a project intends to evolve upon completion of the project, while ensuring that progress towards outcomes and goals will continue. A sustainability and project closure plan may include several scenarios or contingencies that address risks and may also allocate additional resources when it may not be possible to exit entirely.

In previous phases, emphasis was put on ensuring that a sustainability plan is in place so that preparations can be made throughout the project to make sure that when the project closes, all sustainability components have been planned and accounted for.

Sustainability and Humanitarian Relief Projects

The primary objective of humanitarian relief projects is to provide immediate assistance after a disaster event in the form of food, water, shelter, healthcare, and basic needs. There is little to no sustainability in these outputs and, in all reality, that is not the purpose of humanitarian relief projects. Sustainability plans and sustainability, in general, are geared more toward development projects so it is unlikely that humanitarian relief projects will include elements of sustainability.

However, it is possible to approach humanitarian relief projects in a more sustainable way, which means that resources are used optimally, with the least amount of waste as possible given the context. Are resources being used in the most efficient way possible? Are we considering the impact on the community and environment with the intervention we are seeking? Sustainability is not only about ensuring project outcomes serve the longer-term, but are also about the way in which we approach our work.

Unfortunately, while project closure is of great importance, it is often overlooked and/or under-resourced. With pressures to move on to new projects and reassign staff members to other activities, the most practical way to ensure a complete project closure is to include it in the project plan. With that being said, there are several scenarios that could happen at the end of a project as illustrated in Figure 45.

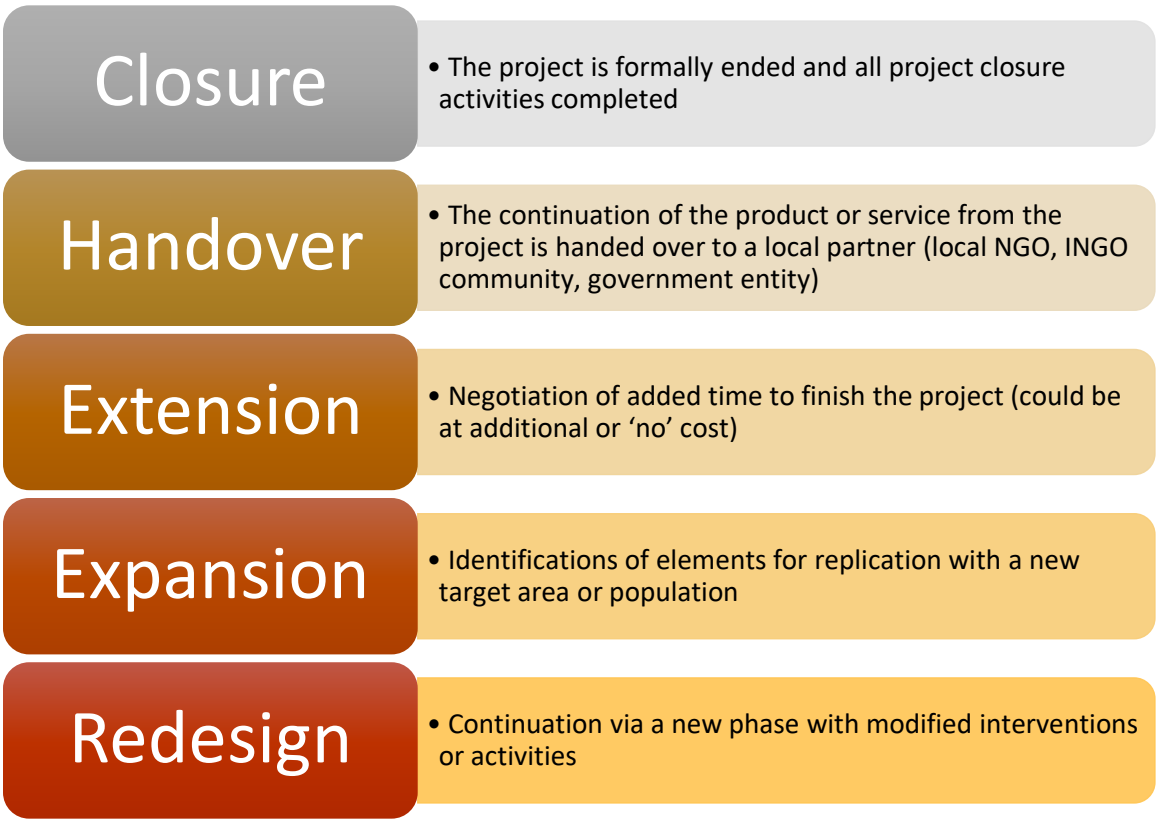


Figure 45: Closure scenarios

The way in which the project will be closed should be considered starting from the Identification and Definition phase primarily because the approach and planning that takes place during the project will differ depending on the desired closure. In the case of extension, this is often not planned for but rather something that happens as a result of changing circumstances or inefficiencies in the project design and planning.

Project No-Cost Extension

The term 'no-cost extension' is used frequently in the sector to describe the circumstances in which activities could not be completed within the agreed upon time frame. Therefore, the implementing team requests an extension to complete the activities at no additional cost to the donor.

In this scenario, a no-cost extension – while adding no additional cost to the donor – does incur additional costs to the project team and organization. Salaries still need to be paid, facilities used, and resources expended for the activities to be completed.

Another scenario is that there is budget left over from the project that can be spent on reaching more beneficiaries or including additional activities that will contribute to the outcomes and goal of the project.

Regardless of the scenario, in a no-cost extension, there needs to be great care taken in examining and understanding the impact that will occur on the triple constraint triangle. The project governance should also be communicated to, informed, and participate in the decision making about the no-cost extension and its impact.

2.5.2 Key Outputs

Sustainability Plan: The sustainability plan is developed from the earliest phases of the project and will be further detailed during Planning and Implementation, providing higher levels of detail and specific action points for the organization, entity, or public institution that will take over after the project has been closed.

Reports: Final reports are almost always a requirement at the end of a project. These can include narrative, endline, and financial reports that are provided to the INGO, partner, donor, and/or other stakeholders at the close of a project.

Final Project Evaluation: While final project evaluations are not always done at the project level, in some cases this may be a requirement from the donor or program. The evaluation could be done internally or externally.

Lessons Learned: Lessons learned should be gathered throughout the entire project, but a comprehensive and participatory lessons learned should be conducted at the end of the project by the project team and relevant stakeholders.

2.5.3 Who is Involved in this Phase

A majority of the stakeholders will be involved in this phase. It is also likely that stakeholders will be less focused during the end of the project, with their attention on new phases or new interventions. Regular involvement of stakeholders will help mitigate this challenge and better ensure that stakeholders continue to be involved in the project until it officially closes.

Some stakeholders to consider involving during this phase may be:

- Project Team
- Operations/Support Teams (HR, Security, Supply Chain, and Finance)
- Project Governance
- Program Manager
- Suppliers, Vendors, and Contractors,
- Program Team – INGO Partner
- Beneficiary Community
- Partners

Involving these stakeholders will also help in the lessons learned and final evaluation processes that happen during this phase. Getting a wide array of perspectives on the value of the project is essential to the learning process. While all stakeholders don't need to be involved in all processes, there should be strategic involvement of these stakeholders – the stakeholder engagement strategy is a great tool to use in the Closure phase.

2.5.4 What Does this Mean in Practice

Project Closure can be challenging for project teams if proper planning has not been done to ensure that all components are accounted for during the closing. In practice, stakeholders will play a major role during this phase and should be brought together to ensure that the closure of the project is as robust and effective as possible.

The principles play a big role during this phase. For example, the principle of **participatory** ensures that stakeholders are included in the closure processes, procedures, after-action reviews, and lessons learned. **Comprehensive** project closure dictates that all activities (including closure activities) are planned for and completed. A **well-governed** closure engages the governance structure in this phase, complying with all requirements and getting formal acceptance on the project deliverables, outputs, and outcomes. All closure procedures have been **integrated** into the plan for the project, stakeholders have been informed that it will be closing, and information from the project is compiled into a final report. The closure includes elements of the **adaptive** principle by conducting lessons learned, information from the MEAL reports/data, and resolution of the issues to use to inform future project and program design.

2.5.5 Inputs

To successfully close a project, you will need to have the following inputs:

- Detailed Implementation and Stage Plan
- MEAL Reports (including any lessons learned that have been documented during the project)
- Narrative and Financial Reports
- Issue Log
- Updated Risk Register

The detail and depth of these inputs will depend on if and how they were used during the life of the project. At minimum, there should be an implementation plan and monitoring reports available to conduct the closing procedures.

2.5.6 Processes

Sustainability Plan and Handover

In theory, you have been planning for the sustainability of your project since you identified and defined the intervention, providing adjustments and details as the project moved forward. Now it is time to ensure that all elements are in place so that the partner organization, government institution, or community can continue the work you have done once the project is closed.

There are a lot of things to consider when it comes to sustainability. All the work that has been done in the project to this point can be derailed if a comprehensive analysis of what is required for sustainability is not done. For example, in our Delta River Latrine Building project, part of the sustainability we want to see is for the community to continue to use the latrines after our project has finished. However, that cannot be done if the municipality – which is responsible for taking over – does not have the machinery and equipment needed to maintain the latrines.

In many cases, sustainability is directly linked to handing the project over to a local partner once it has closed. The checklist in Table 39 provides some guidance on the details required to finalize the sustainability plan.

Checklist	Description
Resources	This component includes both the human and non-human resources required to continue the product or services once the project is complete. What kind of people power will be required to continue the intervention results? Are there any specific machinery or equipment needs? Does the continuation of the product or service require any specific technological equipment?
Capacity	Capacity is another important component that will determine the sustainability of a project. If you are handing the project over, you must ensure that the organization, governmental institution, or community has the knowledge and skills to be able to sustain the product or service. Building the capacity throughout the project by utilizing a participatory approach – from start to finish – will inherently provide a more sustainable intervention because these stakeholders will have been involved in the project management processes with your team. They likely will have learned along the way, how to best approach things like managing stakeholders, risk, and technical elements as well.
Risk and Response	There is always risk in handing over a project to a local partner, community, or local government. The more prepared they are to deal with any potential issues and risks, the more likely they will sustain the project. However, risk management and response can be overwhelming, even more so when there isn't a support system in place to assist with risks, issues, and responses. Before handing a project over, it would be highly beneficial to explore the potential risks with the entity you are handing the project over to. Additionally, guiding them through response strategies that include specific actions that should take place may help them from getting stuck or overwhelmed by risks that become issues. Walking through the risk analysis and response process will also build their capacity in understanding how to deal with risk and issues, building resilience and providing a more solid foundation for the continuation of the project.
Stakeholders	Rarely is there only 1 stakeholder involved in the handover of a project. Multiple stakeholders are often required to sustain the results of an intervention and these stakeholders need to be introduced and engaged before the handover takes place.
Processes and Networks	Often times, sustainability requires the coordination and collaboration of a multitude of stakeholders and clear processes and networks for carrying on the work once the project has closed. Are appropriate systems in place to ensure that the product or service can be sustained? Do we need to facilitate networks to promote the sustainability of the product or service?
Motivation	This particular component is a lot more difficult than the others because it requires buy-in from the beneficiaries, community, and stakeholders AND the desire to continue the project outputs and outcomes after the project team leaves. The key to motivating the community or organization to continue the work is regular involvement during the project and building awareness around the importance and value of continuing the product or service.

Table 39: Sustainability plan checklist

Sustainability Plan and Project Closure

A project doesn't have to be handed over to a local partner in order to have an element of sustainability. However, if you are simply closing a project you will have to consider that there will be no organization or entity to continue the work once it has been completed. So, in this instance, what does sustainability look like? Has it been considered in the design of the project? How do you anticipate this will affect beneficiaries and the community in 6 months? 3 years? All of these questions should be considered if the project will simply close and not be sustained through partner organizations or other arrangements.

Reporting

When it comes to everyone's favorite thing about project management, rarely do you find anyone who will say reporting. Reporting elicits a collective *groan* from most project managers and teams, done only because it is required by the donor or partner. However, something to remember when it comes to the importance of reporting is: if it isn't reported, it didn't happen.

Reporting at the end of a project can be intense, with tight deadlines and a lot of requirements. This is part of the indirect work of a project, time and resources should have been allocated to completing the reporting requirements

Final Narrative Report: Throughout the project, several progress reports will have likely been submitted to the partner or donor. The final narrative report will be more robust, usually containing a detailed summary of what took place during the project. Contents of a final narrative report often include the following, but can have more or less requirements, depending on the organization or donor.

- ✓ Project Summary
- ✓ Project Results (Targets Achieved, Indicators, Outputs, and Outcomes)
- ✓ Challenges and Issues
- ✓ Lessons Learned
- ✓ Assets and Inventory Summary/Return/Disposal

Final Financial Report: In theory, all money has been received once the project is preparing to close. Likely, financial reports will have been provided throughout the entire project with the final financial report summarizing the allocation of financial resources, including any and all supporting documents required.

Endline Report: Often, the MEAL team will conduct a project endline report that is then matched against the baseline report to determine to what extent the targets and indicators were met. This report is frequently included in the final narrative report and provides valuable information for the final project evaluation.

Reporting to Stakeholders

Part of transparency and accountability in project management is communicating with stakeholders. While you may not share all reports with all stakeholders, it is important to make sure that findings, lessons learned, and general information on the project is communicated to all stakeholders, particularly the community and beneficiaries. Whether it is the final evaluation, a summary of the final findings of the project, or a closing meeting where lessons learned are conducted and project results shared, it is essential that stakeholders are made aware of what happened in the project and have the ability to participate in the closing procedures where appropriate.

Project Closure Procedures

If the project were to be audited two years following closure, what would happen? Do systems exist to ensure that the administrative, financial and contractual elements of project closure are complete? These systems are critical not only because they help avoid problems with project audits, but they also reduce the risk that there will be disputes with suppliers, employees, and donors regarding the status of accounts. Systems should be identified to assist with each of the following three activity areas:

Contract Closure

Working with the project support teams (HR, Procurement, Finance), all contracts need to be officially closed before the project can close.

- ✓ Are all contracts closed out? Suppliers? Subcontractors? Donors? Others? Implementing organizations?
- ✓ Has the donor reviewed and accepted project deliverables?

Scope of Work Verification

As a project enters the Closure Phase, the project manager should contact the internal and external stakeholders (including the Project Board or the Project Sponsor) to verify that the scope of the project has been accomplished and that the deliverables are accepted. Often, the verification of scope is measured in any final evaluation that is conducted for the project. However, in situations where a final evaluation is not conducted, the verification of deliverables should still be conducted. This usually takes place in a two-step process.

- The project implementation team meets to crosscheck work completed against the project implementation plan. There may be, for example, activities that were delayed early in the project and never performed later.
- Meet with the key stakeholders (donors, community groups) to:
  - ✓ Review accomplishments against the project plan, and then get their acceptance documented by some kind of formal acknowledgment or acceptance.
  - ✓ Make sure they are satisfied, not just with the technical aspects of the project, but also with the overall outcomes (this is often as much about perception as it is about the existence of outputs and achievement of outcomes).

Financial Closure

The finance department focal point should work closely with the project manager to make sure that all compliance and requirements have been closed in the project. This includes any supporting documentation as well as reports. Something to consider include:

- ✓ Has all permitted funding been received from the donor?
- ✓ Have all receivables (project advances, travel advances, and advances to suppliers) been liquidated or transferred to another project number or accounting code?
- ✓ Have all payables been paid?

Disposal of Project Assets

Clear processes for asset disposal should have been established that include any requirements related to approvals, publicity, donor requirements, and reporting. If necessary, the policy will have included any special requirements related to the value of the asset or the type of asset being managed (vehicle, computers, otherwise). Poor asset disposal can have a major impact on project finance as donors may refuse to allow expenditure for assets, which have not been correctly disposed of and they may require repayment or they may reduce payments from final contract payments.

Administrative Closure

Administrative closure includes personnel, assets, and reporting compliance requirements.

- ✓ Have project personnel been released or reassigned?
- ✓ Has the project equipment, vehicles, offices been reallocated? Sold? Transferred?
- ✓ Are project reports and closure documents complete?
- ✓ Are project archives and/or files up to date?

Project Closure and Auditing

Likely, as the project closes, you will be required to go through some form of an auditing process. Auditing is usually done by the donor or INGO and explores the documentation, processes, and procedures of the project. Some things the project team should keep in mind in regards to audits include:

- Ensuring all documentation is complete, comprehensive, and complies with donor requirements.
- Ease of access to the documentation, processes, and procedures.
- Access to project team members and project support staff.

*Donors and INGOs usually require that the implementing organizations keep both hard copies and digital copies for a set number of years, whether that be 3, 5, or 10 years. The information will be available in the contract and is non-negotiable. The importance of proper documentation cannot be stressed enough.

Project Evaluations

As previously mentioned, final evaluations are not always conducted at the project level. However, if they are required, they need to be approached in a systemized manner. Rushing through the evaluation process will not provide the kind of feedback and recommendations needed to understand the value of the project, to be able to use the information in the evaluation for learning, project and program design, and sometimes even to inform policy development.

A final evaluation should have been planned from the beginning of the project, with an outline of the purpose and desired key evaluation questions to be answered by the evaluation team or evaluator. Depending on the size and complexity of the project, a tentative timeline and budget should also have been allocated for this exercise, providing the evaluator and team with sufficient resources to be able to make a data-informed judgment on the value of the project.

The evaluator and team will work closely with the MEAL and project teams to develop a methodology, work plan, and tools for the evaluation. Project documents and monitoring plans should be provided by the team and the evaluator and team will likely need to coordinate through the MEAL and project teams to conduct data collection with stakeholders.

Once the evaluation is completed, the results need to be shared with relevant stakeholders, particularly if the project falls under the umbrella of a program. The results of the evaluation will be filtered up to the program level in that the project outcomes should become outputs at the program level.

If an ex-post evaluation will be conducted, the project manager, MEAL team, and other stakeholders (e.g., governance and program manager) must prepare all documentation, terms of reference, MEAL data, and information that will be used to conduct the ex-post evaluation.

Lessons Learned

Lessons learned are the organization's memory bank. Ideally, the project team will develop a lessons learned log that tracks lessons learned as they occur, or at least at major evaluation points or milestones throughout the project. As the project enters the Closure Phase, it is important to ensure that the lessons learned related to the project are adequately detailed and are filed and easily accessible to the organization and program teams. This means that all files (both hard and digital copies) need to be properly organized and named to facilitate others' ability to access them.

However, it is not enough to simply do the lessons learned and file them, a process needs to be put in place to ensure that the lessons learned from a project are used within the organization. If your project falls under the umbrella of a program, lessons learned can be used at the program level to help inform future project design and to ensure that issues aren't repeated in other projects taking place under that program.

Lessons Learned and Sector Collaboration

Without a doubt there is hesitance to share information between organizations. This is usually due to competition for funding and a general environment of mistrust. However, our project, our organizations cannot make substantial impact alone, this will require the work and collaboration of a variety of organizations and stakeholders.

Sharing lessons learned with a variety of stakeholders, including sector clusters or organizations working in similar thematic areas, provides a strong foundation for ensuring that all projects under that thematic area work toward a common goal and work together to achieve that goal.

Furthermore, it is critical that the project manager distribute the lessons learned to those who can benefit from them. Without a system to capture end of project learning, the organization will continue to reinvent the wheel each time a decision is made to pursue a similar project. Donors are often interested in ensuring that learning is disseminated throughout the sector to ensure that new projects benefit from learning generated by other projects they have funded. Nowadays, NGOs often publish evaluation reports, and databases exist which include thousands of evaluation reports from many different organizations.

A great tool to use in the lessons learned process is the Issue Log. Issues often result in changes or provide explanation as to why something did or did not occur. Modifying the Issue Log and including a column for the lessons learned is a great way to get the process of thinking about issues started.

Issue Reference	Reported by	Description	Date Reported	Assigned to	Date Assigned	Status	Status Date	Resolution	Lessons Learned

Table 40: Modified Issues Log

Lessons learned should be collected throughout the life of the project and compiled as the project closes. Using the Decision gate process is a great way to ensure that lessons learned are collected through all phases of the project and makes the process less overwhelming as the project closes.

Another great tool that can be used for end of project learning is an 'After Action Review'. This is a simple, quick and versatile learning activity that can be used to identify and record lessons and knowledge arising out of a project by involving a variety of stakeholders in the brainstorming and discussion.

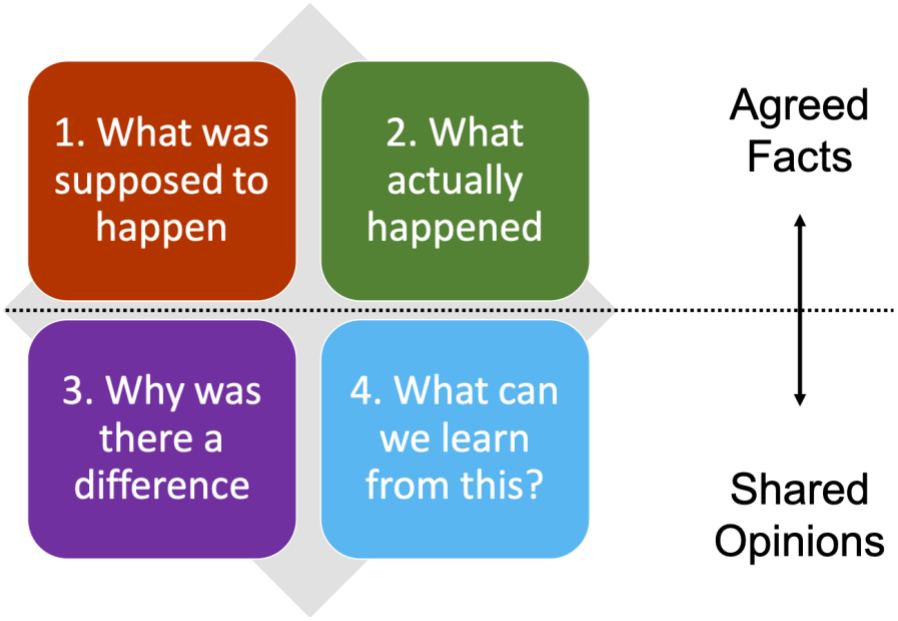


Figure 46: After Action Review

After Action Reviews are relatively straightforward to organize and implement. During the review, questions are asked that help participants understand what was planned versus what actually happened:

- ✓ What did we set out to do?
- ✓ What did we achieve? Focus more on facts than opinions;
- ✓ What went really well? Again, look at the facts. Why did it go well? Compare the plan to reality.
- ✓ What could have gone better? Compare the plan to reality. What prevented us from doing more?
- ✓ What can we learn from this?

The advantage of a learning review is that it can collect useful information relatively quickly and without expending extensive resources. The facilitation of the review is intended to be quick, open and not focused on deep thinking and discussion. The primary intent is to inform decisions on operations, policy, or strategy related to ongoing or future program interventions.

Reflections on Project Closure – You are Only as Good as you Finish

Closure can be chaotic. Team members may be in the process of leaving or migrating to other projects. New projects may be starting while one is ending, and there is often a crunch for time to get all the closing procedures in a project completed.

The thing is, you can do an impeccable job identifying the project, setting it up, planning for it, and implementing the activities, but if you do a poor job closing the project, that is what will be remembered. This is especially the case in the final reporting and documentation of the project as well as with the evaluation and lessons learned.

Something that is helpful to ensure that all activities are completed, and done well, during this phase is to plan for them. A comprehensive implementation plan will include the closure procedures and any handover that needs to happen. You don't want these activities to be ad hoc, you want them to be well thought out, comprehensive, and intentional. Not done quickly just to meet the compliance requirements.

Your project is only as good as it finishes, so plan the closure from the earliest phases and provide enough time and resources to make sure that all activities can be completed.

SECTION 3. PROJECT DPRO PRINCIPLES

Principles guide the way in which we approach projects, providing a framework for structuring our management of interventions. As briefly described in the Introduction, the Project DPro outlines 5 Principles of Project Management: Well-Governed, Participatory, Comprehensive, Integrated, and Adaptive.

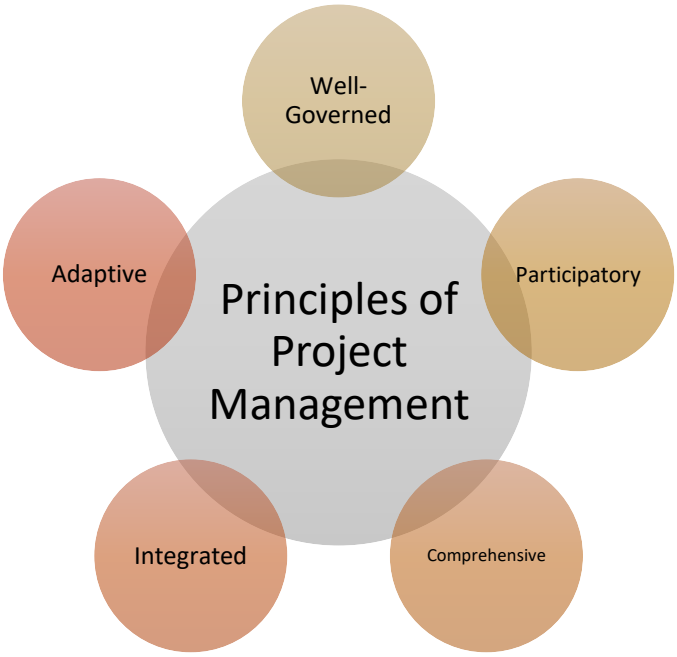


Figure 47: Principles of Project Management

The Principles of Project Management are presented in this Section of the Project DPro Guide.

3.1 Principle: Well-Governed

"The speed of decision-making is the essence of good governance."

– Piyush Goyal

3.1.1 What is the Well-Governed Principle and Why Does it Matter?

Project governance is an important part of project management but one that often lacks clarity and precision. Project governance serves a multitude of purposes that are critical for the success of the project. The components of the Well-Governed principle require that stakeholders put substantial thought and consideration into how decisions are made within the project.

Part of the challenge in implementing a well-governed project is understanding what it means. The term can be very ambiguous and daunting for project managers and stakeholders insofar as they know they ought to have a governance structure but aren't really sure how to go about it.

There are a several ways in which the governance structure interacts with the project manager and project itself including:

- Ensures organizational commitment and accountability for the project;
- Decides on proposed project changes (scope, budget, calendar or others) that extend beyond the project manager's agreed tolerances;
- Oversees the project, providing resources, direction and insight as necessary;
- Monitors the ongoing viability of the project, making decisions to terminate the project if necessary;
- Supports and advises the project manager on the management of the project, especially on issues that extend beyond the span of control of a project manager;
- Ensures that a variety of stakeholder perspectives are included in the project;
- Advocates for necessary organizational support and resources for the project; and
- Ensures that the organization "owns" the process and results of the project.

A well-governed project will have clear lines and authorities in place for the project manager ensuring that decisions are made within a specific framework outlined in the governance structure. Well-governed also provides a network of much needed support for the project manager throughout the life of the project.

3.1.2 Well-Governed and Identification and Definition

Sponsor, Board, Steering Committee

It is during this phase that the project team – in collaboration with stakeholders – begins to examine what kind of governance structure would be most appropriate given the resources and context the project will be operating in. Do you have the resources for a steering committee or board? Is a project sponsor more appropriate?

Alignment with Program, Portfolio Structure

A project must align with the strategy outlined at the program and portfolio levels. The project manager must be aware of how the project fits into the overall strategy. Input from governance stakeholders during the Identification and Definition phase will better ensure that the project fits within these strategies and also provide valuable insight into defining the parameters of the project.

3.1.3 Well-Governed and Setup

Governance Structure

The brainstorming about the type of governance structure should have been envisioned during the Identification and Definition phase. It is during the Setup phase that this brainstorming is put into a formal structure that is then communicated to relevant stakeholders. The governance structure should be included in the Project Charter that is developed during this phase.

Project Tolerances

During the project Set Up Phase, tolerances should be established to identify the parameters within which project delivery will be acceptable – the overall project tolerance levels. The tolerances need to be established and approved by the governing structure of the project. This could be the project board; however, if no board exists, the tolerances will need to be established by the project sponsor or the donor. If at any point during the monitoring of the project, the project manager perceives a tolerance level might be exceeded the project governance body should be consulted.

3.1.4 Well-Governed and Planning

Communication

Planning needs to be balanced and comprehensive and part of that is developing a communication plan that outlines who should be communicating what, to whom, and when.

Part of the science of good communication is to carefully identify the appropriate communication strategy in relation to the project's size and complexity. For example, in the context of a small project, overly formal communications practices can quickly become an administrative burden, interfering with other project activities. In the context of a large project, informal or ad hoc communication practices can quickly turn success into disaster if important issues and opportunities are missed through lax communication planning and implementation.

Decision Gates

During planning, formal Decision gates are setup to ensure that the right project is still being done in the right way. In a well-governed project, a multitude of stakeholder perspectives will be involved in the Decision gate process. The project manager should put set points in the project where several of the "living" processes are reviewed through Decision gates. For example, the risk and stakeholder analyses and the project charter should all be reviewed, updated, and revised according to the context of the project. Planning these Decision gates, in collaboration with the governance, will better ensure that they take place and that the right stakeholders are participating at the right time.

Risk Planning

Risk planning is critical to the risk management process. Part of the risk analysis should include which risk tolerances in that the project manager has clearly outlined authority levels for different risks and their responses. Working together during the planning phase with the governance of the project to determine which risks are above the tolerance levels and planning for those risks in this phase will provide for a more clearly outlined course of actions if these risks become issues at any time in the project.

3.1.5 Well-Governed and Implementation

Issue and Risk Management

Most of the issues in the project will happen during the implementation phase as activities take place. Part of issue management requires that tolerances are set for the decision making about risks if they should become an issue. Knowing these tolerances helps the project manager to determine what kind of response or escalation is required.

Furthermore, risks will change – particularly during the implementation phase. New risks may come up, risk already identified may change in their impact and probability, so the risk analysis process needs to be iterative.

Change Control

Issues almost always result in some sort of change in the project – whether that be a minor change or a major change. In a well-governed project, any changes will be assessed for their impact on the Triple Constraint Triangle and the various stakeholders in the project.

The actual process of change is not the only component of a well-governed project, however. Communication of those changes is also very important, particularly since it is likely that the change will affect at least one aspect of the Triple Constraint Triangle.

3.1.6 Well-Governed and Closure

The project manager needs to ensure that there is a systemized process taken for closing out the project, which should include guidance and collaboration with the governance structure. This should also have been planned from the beginning of the project and validated as the project moved forward. Contractual, administrative, and financial closure procedures must follow organizational and donor guidelines and compliance requirements and it is the responsibility of the project manager to make sure that all procedures are followed.

Lessons Learned and After-Action Reviews

Conducting and disseminating lessons learned is standard in a well-governed project. These lessons become part of the institutional memory and can be useful for future project design.

Lessons learned and After-Action Reviews can also include the project sponsor, board, or steering committee as participants. Because the governance has a bird's-eye view of the project, they may be able to provide a different perspective in these sessions and contribute to a richer analysis of the project.

Authorized Project Charter

As the project closes, the governance structure – whether that be a sponsor or board – should receive the updated project charter and sign-off on it as well as any other remaining documents that are relevant. The charter should have all the updated information regarding the project and ought to have been updated throughout the entire life of the project.

Risk and Issue Management and Well-Governed

In our Delta River Latrine Building project, one of the risks is that weather (rain) will delay the digging of the holes. Let's say that this risk does turn into an issue and it rains for 5 days straight. The project manager has a tolerance level to make decisions up to a delay of 3 days in the project. What does this mean in reality? Because the delay is above the tolerance of the project manager's authority level, he or she must escalate the issue to the board. Once the board reviews the issue and the response strategy developed, a decision can be made on how to proceed forward.

3.2 Principle: Participatory

"Coming together is a beginning. Keeping together is progress. Working together is success."

– Henry Ford

3.2.1 What is participatory and why does it matter?

An effective project manager will be able to determine when and how to use participatory management techniques in a project. As a leader and manager, it is important to encourage the contribution and participation of stakeholders throughout the entire life of the project, to build trust with stakeholders, and to establish a common vision that stakeholders can work toward.

Participatory techniques include a demonstrable ability to listen and take account of diverse perspectives, and to be able to employ culturally relevant situational leadership that is appropriate to the context of a program. Working in this manner is the best way to build a sense of ownership at the project, and to maintain a project's value and ongoing relevance.

Participatory project management sets a foundation for:

- Managing Expectations
- Comprehensive Project Identification, Definition, and Planning
- Clear Communication
- Project Sustainability
- Engagement of Stakeholders

Stakeholders will have different levels of involvement in a project and in the project phases. Those who are most involved should be included and consulted in a way that cultivates trust and strengthens their buy-in to the project. This can be done by making sure the right voices are heard at the right time by creating a project climate in which stakeholders are encouraged to participate and engage. It doesn't mean that all stakeholders should be consulted every time a decision needs to be made or that decisions must be achieved by consensus or by committee. Instead, the project manager should identify and involve multiple stakeholders at different times throughout the project, managing their expectations and making it clear how their contribution will enhance decision-making processes.

3.2.2 Participatory and Identification and Definition

The Project Identification and Definition provides an opportunity, early in life of the project, to begin creating the culture of participation. The project manager should use this phase as an opportunity to build relationships that pave the way for future communication and collaboration.

While participatory approaches in this phase can require more time and resources, the ultimate results will benefit from the following advantages:

- Stakeholders have the opportunity to take control of their own development process;
- The ultimate project design will be stronger; and
- Increases project ownership among stakeholders.

It is also during this phase that the stakeholder analysis begins through the identification of stakeholders and mapping their power and influence using the Venn Diagram. This should provide clarity for the project manager and team about who needs to be involved in which phase and process.

Data Collection, Needs, and Problem Analysis

Gaining different perspectives during the data collection, need analysis, and problem analysis, provides a more holistic outlook of the project. While it isn't required that every stakeholder be involved in every process, the project manager should be able to identify and engage stakeholders at appropriate times throughout the project.

High-Level Estimates

High-level estimates are developed during this phase, primarily as a launching point for the project proposal and to gain a better understanding of what will be required during the project. For this to be done well, stakeholders and team members should be involved. For example, when developing the high-level budget for the proposal, bring in the finance team to assist in outlining the required costs. If the project requires technical experts, engage the human resource department to explore the availability of the technical experts in the market and the time required for recruiting and hiring these personnel. Furthermore, if your project is under the umbrella of a program, the Program Manager should be consulted at this stage as well.

3.2.3 Participatory and Setup

The Setup phase provides the opportunity to further engage stakeholders and use a participatory approach. During this phase, the governance structure is determined, risks are identified, the project charter developed, and the project is officially launched. All of these processes can utilize a participatory approach.

Risk Identification and Assessment

The risk identification and assessment will be detailed in the Setup phase, primarily so that the risk plan can be incorporated into the planning phase more comprehensively. It can be really challenging to comprehensively identify the risks in a project, but this process can be enhanced through a participatory approach. For example, engaging the beneficiaries in identifying and assessing risks may bring about risks that the project team would not have considered. The supply chain or MEAL teams may provide insight on risks from their perspective as well. Likewise, these stakeholders may be able to develop more appropriate risk response strategies because they have more knowledge on how the risk will impact the project. The moral of the story being that a comprehensive risk process needs to include participation from a variety of stakeholders.

Project Launch

The launch of the project is an opportunity to bring all stakeholders together to make sure there is clarity about the project, to manage expectations, and to promote buy-in for the project. The launch could also be an opportunity to share the Project Charter, which provides a description of the project in a concise form.

3.2.4 Participatory and Planning

A lot of work is required to comprehensively plan for a project. The implementation plan will include multiple documents that are used to guide the project manager and team through the implementation.

Schedule Planning

The foundation for schedule planning rests on identifying a comprehensive scope of work. The Work Breakdown Structure (WBS) is the tool used to define the project scope for the project. This can more effectively done by involving those who will be doing the work in the scope definition. For example, if working with implementing partners, be sure to engage them in breaking down the activities and don't forget to include all scope required to complete all project activities.

Participation of stakeholders also creates more accurate resource and time estimates for activities. Again, those who will be doing the work may have a better idea as to what will be required to effectively complete project activities.

Sustainability Planning

A lot of emphasis is put on the sustainability of interventions. So how do we go about developing sustainability plans that are relevant? Frankly, by including stakeholders in the planning for sustainability. Taking a participatory approach to sustainability planning will:

1. Make the plans more relevant and accurate;

2. Help identify any gaps that need to be addressed before the project closes;

3. Promote stakeholder buy-in and motivate them to sustain the outcomes, products or services.

4. Build capacity of stakeholders who may be taking over the activity, outcomes, service, product, etc. once the project closes.

3.2.5 Participatory and Implementation

Implementation is a dynamic time in the project, with multiple stakeholders involved and a lot of activities taking place. The iterative process of planning and implementing is the time when project managers must ensure full and complete participation by all stakeholders. When teams follow established processes and communicate consistently, a project manager is better equipped to allocate resources, prioritize activities, and manage risks.

Project Change Control

Changes may be required during implementation. The project manager will rely on information obtained through the MEAL process and issues management, among others, to determine if any changes need to be made in the project. While decisions should be informed from data, they should also include the perspectives of stakeholders in the change control process. Part of change control is assessing what kind of impact the change will have on the project and triple constraint triangle. Stakeholders are a huge part of the project and any impact on them should also be considered.

Decision Gates

Decision gates are optimal points in the project in which stakeholders can be engaged and participate in project decision making. If using stage planning, these decision gates will take place at the end of each stage and are great opportunities to involve stakeholders in: reviewing the information and data to day; assessing the justification of the project, determining if any changes need to be made; and updating all living documents for the project.

If stage planning is not a part of your project, Decision gates can still be used as a tool to engage stakeholders and establish a precedent for decision making and review in the project.

Iterative Project Planning

Stage planning and rolling-wave planning will likely take place during the Implementation phase. Having the right stakeholders at the table during this process increases the accuracy and credibility of your implementation plans. Are the people who are doing the work participating in the planning? Have you received sufficient feedback from your MEAL, HR, supply chain, and other teams about the situation on the ground?

3.2.6 Participatory and Closure

Much like the other phases in the project, the closure should also be participatory. This will be particularly beneficial if activities, services, or products will be handed over once the project is completed. If stakeholders have been consulted and informed throughout the lifecycle of the project, this phase should come as no surprise. The stakeholder engagement strategy should include their participation during the closure processes.

Lessons Learned and After-Action Review

Lessons learned and after-action reviews can be enriched through a participatory approach, examining the project components through different lenses and providing insight that can be used in future project design.

Project Closure Meeting/Event

A meeting or event that acknowledges the formal closure of a project should be part of the closure procedures. The meeting or event can be simple or fancy, what matters is to highlight what was accomplished during the project, the challenges, and formally acknowledge the relationships and stakeholders that contributed to the project.

3.3 Principle: Comprehensive

"Management is, above all, a practice where art, science, and craft meet."

– Henry Mintzberg

3.3.1 What is Comprehensive and why does it matter?

As a project manager, your primary responsibility is for the overall management of the project. This requires that you combine strategic, leadership, and technical skills, have an eye for detail, and are responsible for shaping, guiding, and supporting the activities that will take place during the project.

The ability to define, plan, and sequence the resourcing of deliverables is a skill that should be applied at all phases of the project. As a project moves through the phases, the project manager ensures that learning from one stage is transferred to the next, building and re-enforcing the project in a way that is responsive to its internal and external environment.

In essence, comprehensive project management involves applying equal rigor and attention to each phase of the project, ensuring that all project components (direct and indirect) are delivered and documented effectively.

A project manager is required to operate in and navigate environments that are dynamic and constantly changing. If teams are not engaged and documentation is incomplete, there will be an increased likelihood of important parts being missed, exposing the project to risk and failure.

Comprehensive project management requires that the project manager has the ability to identify and manage all of the direct and indirect work of the project in a holistic way. It is also an essential approach for navigating uncertainties and being able to balance stakeholder expectations, interests, and engagement. Essentially, comprehensive project management is a juggling act that requires the project manager to be forward thinking and agile in his or her approach, ensuring that no balls are dropped in the process.

To do this, the project manager must ensure that considerations for what will be required from all aspects of the project are examined and integrated to bring about the desired results.

3.3.2 Comprehensive and Identification and Definition

During the Identification and Definition phase, the blueprint for the project will be determined through an analysis of the problem, needs, context, etc. The principles of Comprehensive and Participatory work hand-in-hand during this phase as the identification of needs is determined through a consultative process with stakeholders and triangulated data collection process.

Stakeholder Identification and Analysis

As the framework for the project is developed, a comprehensive stakeholder identification and analysis exercise ought to be done. Identifying as many stakeholders as possible, and assessing their power and influence in the project will ensure a more sound stakeholder engagement strategy during the project.

This process will also provide stronger relationships with stakeholders and manage expectations more effectively, establishing the foundation for proactive stakeholder engagement throughout the project.

Needs Analysis

Needs within communities can be vast and complex, which is why a comprehensive needs analysis is beneficial. However, projects do not operate in a vacuum, and require that the analysis incorporate elements from the external environment, internal organizational and programmatic priorities, as well as the capacity of the team.

3.3.3 Comprehensive and Setup

Risk Analysis and Planning

As a project manager, you will need to develop comprehensive systems and processes to identify, analyze, monitor, and manage all risks associated with the project. The tolerance levels for managing risk should have been determined in the Identification and Definition and included in the Project Charter, which is an output of the Setup phase.

The project manager should also identify points in the project in which the risks will be reassessed to determine if new risks have emerged, risk impact and probability have changed, and response strategies are still valid and feasible. Determining this process in the Setup phase allows for the risk planning to be incorporated into the planning process.

3.3.4 Comprehensive and Planning

Project planning needs to incorporate the direct and indirect work of the project. How many times have recruitment, procurement, or reporting caused delays in your projects? This may be because these processes took more time than anticipated, but it may also be because these activities were not included as part of a comprehensive planning process. Including the direct and indirect work, and involving stakeholders who will be carrying out the activities will lead to a more accurate estimate and more comprehensive implementation plans.

Implementation Plan

While the project manager may be tempted to think that the documents developed during the Identification and Definition Phase (logical framework, project proposal, etc.) are sufficient to define the scope of the project. However, this is certainly not the case. The logical framework and the project proposal were written for very distinct purposes. While they are especially strong at outlining the high-level logic of the project and selling the project to donors, **they are not designed to guide a team in the implementation of the project**.

Before the actual work of the project begins, the project manager needs to confirm that the scope of the project is comprehensive and detailed. Care should be taken to ensure that information about the indirect work of the project is included in the scope, for example, details related to procurement, coordination, communications, human resources, reporting, and risk management.

3.3.5 Comprehensive and Implementation

Managing Project Components

During implementation is where a lot of the issues and challenges will occur. These issues and challenges can be distracting, taking the focus away from other parts of the project that need to be managed during implementation. The project manager must create an environment within the project that in which all aspects of the project are accounted for and managed appropriately. While some of the tasks and activities will be delegated, the project manager is ultimately accountable for the project and therefore must comprehensively manage all components of the project.

Risk Monitoring, Review, and Updating

While the attention of the MEAL plan is focused on tracking the project's progress against the indicators at each of the levels of the project Logframe, the project team must also track the project risk throughout the life of the project. Risk monitoring, in comparison to MEAL monitoring, involves continuously surveying the project environment and anticipating the possibility that something may go wrong, or not turn out as planned. The project manager needs to continually and comprehensively survey the risks which have the potential to threaten project success and actively manage these threats throughout the life of the project.

3.3.6 Comprehensive and Closure

The project manager is accountable for ensuring that all activities are officially and comprehensively closed. Making time and planning for closure activities is important will reduce the chaos and stress associated with this phase and are part of comprehensively managing a project. Furthermore, ensuring that all aspects of a project are comprehensively closed is the best way to safeguard the reputation of an organization.

3.4 Principle: Integrated

"Unity is strength…when there is teamwork and collaboration, wonderful things can be achieved."

– Mattie Stepanek

3.4.1 What is Integrated and why does it matter?

Applying an integrated approach ensures that all aspects of a project are aligned and coordinated so that outputs and outcomes can be achieved and contribute to the goal of the project. Integration is the process by which a number of separate elements are combined and coordinated to achieve a harmonious whole.

3.4.2 Integrated and Identification and Definition

Team Integration

One of the most important challenges in project management is ensuring that the project manager along with the project support staff (i.e., finance, security, HR, IT, MEAL, and supply chain) and their managers are closely aligned and integrated. This relationship building should begin during the Identification and Definition phase. As the project is defined, the appropriate support staff should be involved in establishing high-level budget parameters, identifying skills and specifying supply needs.

3.4.3 Integrated and Setup

Risk Integration

During Setup, the project manager will be focused on ensuring that the project is ready to proceed. Part of this includes completing a comprehensive risk analysis so that it can be integrated into the project planning process.

3.4.4 Integrated and Planning

As a project enters the Planning phase, the support staff can be especially helpful in ensuring that project components, such as budget formats, are correct, that estimates are accurate, that the budget item list is comprehensive and that the budget is detailed. They will ensure that supply chain plans are accurate and that recruitment and skills development planning is incorporated into project plans.

Integration during Planning will also take into account the relationship between the scope, time, budget, and quality elements of the project to develop an accurate implementation plan.

The Triple Constraint Triangle

Remember the Project Constraint Triangle? The sides of that triangle are all connected and it is impossible to manage one of the key project constraints (time/calendar, cost/resources, scope/quality) without taking the others into consideration.

For example, if your project has an inflexible time constraint for your project – "It MUST be done in one year!" – then make sure that the scope requirements and the resources (money, people and materials) are planned to ensure that the schedule is realistic.

Conversely, if one of the other key project constraints is fixed (Budget? Scope? Both?) then recognize it is likely these limitations will impact the calendar of the project.

Notice that the major categories of work in the WBS are consistent with the contents of the project logical framework.

However, the WBS will include a level of comprehensiveness and detail that is often absent from the logical framework. There might be additional categories of work included in the WBS that were not included in the logical framework. The WBS is also intended to provide the level of specific detail that is often missing in the logical framework.

3.4.5 Integrated and Implementation

During Implementation, support staff will be critical to ensuring that project stays on track. Think of each team member as a part of a puzzle. If one piece of the puzzle is acting alone and not integrated with the other pieces, the puzzle will not be complete. It will be essential to have continuous communication and interaction with the MEAL, HR, finance, security, supply chain, and other teams throughout implementation to ensure that all pieces of the puzzle fit together. It is also critical to ensure integration with any implementing partners, so don't forget to include them.

3.4.6 Integrated and Closure

Sustainability Plan

The integration of sustainability throughout the project should ensure that the sustainability plan that has been validated (at points throughout the project) considers and integrates all elements that are critical to create an environment that allows for the sustainability to take place.

Lessons Learned and Evaluations

Lessons learned and evaluations are valuable in assessing the project but can also be integrated into the programmatic and institutional memory as well.

3.5 Principle: Adaptive

"Business and human endeavors are systems… we tend to focus on snapshots of isolated parts of the system. And wonder why our deepest problems never get solved."

– Peter M Senge

3.5.1 What is Adaptive and why does it matter?

No project exists in a vacuum. Projects "live" within programs, portfolios, sectors, and national strategies. In addition, projects are managed within the context of organizational systems and donor structures. In one sense, these are the broader operating environment for projects. As a result, since all these factors impact the performance of projects, they should be taken into consideration from the definition of the project to the closing.

The term "adaptive" within the context of project management means the ability of the project manager, team, and stakeholders to analyze the environment and responds as necessary. Flexibility and agility are paramount to the Adaptive principle, providing a framework within which the project can respond to the changing environment. To do this, the project manager needs to be aware of the way in which tools can be used to ensure the project is more adaptive.

Monitoring, Evaluation, Accountability, and Learning

Information and data from monitoring provides insight for the project manager as to what extent the activities and outputs are being achieved – if they have been completed on time and within the agreed upon budget, meeting the target outlined. Data from the monitoring of the project provides the project manager with real-time information as to the status of the project. For example, if the project has planned to build 30 latrines by the end of phase 2 and has only built 15 at the end of phase 2, this is a red light for the project manager that something is off and should be explored further.

The establishment of accountability mechanisms allow for stakeholders to provide feedback during the project. Whether that be a satisfaction survey or focus group discussion with the community, these mechanisms verify that the intervention is providing what was intended to the targeted population, and provides information to the project manager about the viewpoints and perspectives of various stakeholders. The most important part of this accountability mechanism is not to just do it but also to learn from it. What is beneficial about the feedback that can be used for future stages or phases of the project? How can the feedback be used in iterative project planning? Was the mechanism effective in providing substantive feedback from stakeholders that can be used for learning? What are the learnings that we can use to influence future project design and/or how can we escalate the learning to the program level?

Monitoring and accountability cannot be implemented in a vacuum, but should rather be considered as part of a cycle or process in which there are set intervals in the project where this information is reviewed and analyzed to improve or change elements of the project to achieve optimal results by the end.

Integrated Change Control

Change happens, and that's ok. It is how we approach and respond to change that makes the difference. We also don't want to randomly make changes to projects, in an ad hoc manner. There should be a structure and assessment that determines which changes should be made, how they should be made, and the impact they have on projects. This is where Integrated Change Control comes into play, providing a set steps to follow to ensure that only authorized and required changes are made to the project.

Change control may differ depending on the complexity of the project, the organization, and the tolerance levels of the project manager. However, what the project manager needs to ensure is that the change control in the project is:

- **Managed** through a formal change management process.
- **Analyzed** to ensure that implications of those changes are thoroughly considered at the project and the program level.
- **Documented** to illustrate their complete impact on all the integrated elements of the program.
- **Communicated** to key project stakeholders.

Clear tolerances need to be set up so that there is clarity for stakeholders on who can make which decisions and has what authority levels.

Decision gates

Decision gates provide formal and informal opportunities for the project manager, team members, and stakeholders to review the project and determine if changes need to be made, if the project should continue as planned, or if it should be stopped altogether. Revisiting and reanalyzing the "living" project documents and reviewing the information and data from the monitoring and accountability mechanisms in the project are essential to remaining adaptive in the project.

Some of the tools to revisit at Decision gates may include:

- Stakeholder Analysis
- Risk Analysis
- Logical Frame – Paying particular attention to the indicators and validating the assumptions
- Project Charter
- Detailed Implementation Plan/Stage Plan

We want to ensure that our decisions, changes, and flexibility in the project are driven by data, information, and analysis which is why many of the tools and documents in the Project DPro are considered "living" documents. This is part of the Adaptive principle in that there are rarely any project scenarios in which the project team gets everything right at the beginning and doesn't need to make any changes as the project moves forward. It is also rarely the case where stakeholders don't change, new risks don't evolve, additional details don't need to be provided in the plan. There is no such thing as a perfectly planned project, so we need to review, revisit, and re-analyze these tools as we move through the project to ensure that we have the most up-to-date information that will guide our ability to adapt and make decisions.

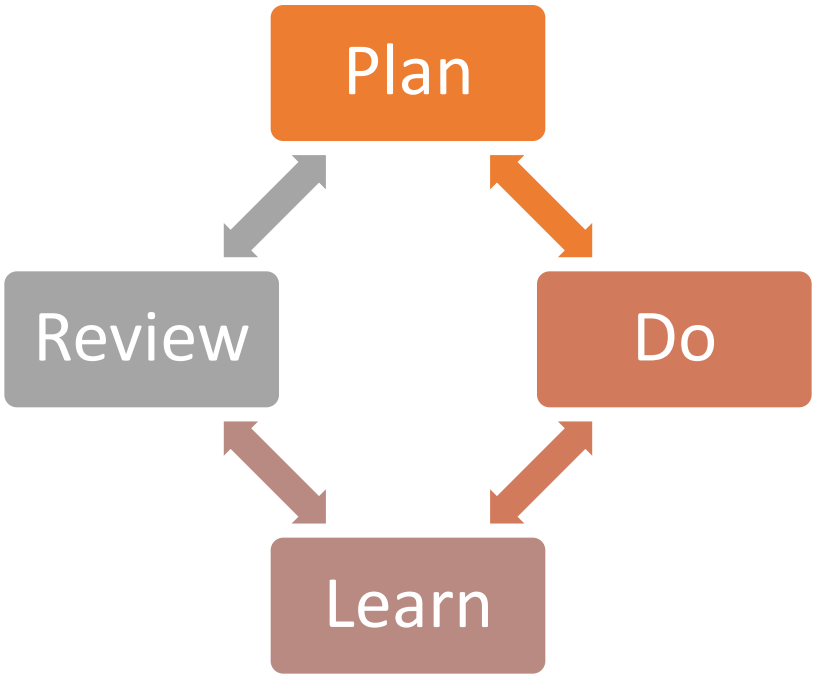


Figure 48: Plan, Do, Learn, Review Process

3.5.2 Adaptive and Identification and Definition

As the interventions are defined and the target population agreed upon, the project manager can use a wide array of tools to identify needs and determine priorities. It is also important that the project manager, team, and stakeholders understand that the project will likely not be implemented in a standard environment. Development and humanitarian projects are responding to a need, and that need may be different depending on the stakeholders consulted. The need may also change – which is particularly the case for humanitarian projects. It is important that the data collection process includes a variety of perspectives so that a more holistic understanding of the context is provided.

3.5.3 Adaptive and Setup

The MEAL framework, governance structure, and risk analysis are all relevant adaptive tools that are developed in this phase. These tools are critical for the project manager to be able to ensure that the management of the project is responsive to changing contexts and issues.

3.5.4 Adaptive and Planning

Iterative planning is an agile and adaptive approach that establishes the project plan in stages rather than trying to plan for the entire project all at once. In relationship to the Adaptive principle, this provides the opportunity for Decision gates to be built in after (and sometimes within) each of the stages so that an analysis can be done that explores what needs to happen during the next stage of the project.

Agile Project Management

Agile Project Management is the umbrella under which a variety of different tools fall that allows for a more adaptive approach to project management. In Agile Project Management:

- Time is fixed by dividing the project into short fixed time iterations (stages is the terminology used in the Project DPro);
- Cost of resources is fixed;
- Scope is variable. It focuses on the highest priority requirements, with the expectation that the scope will evolve as the project progresses.

There is a decision gate at the end of each iteration to re-prioritize existing requirements, to consider any new ones as the project moves forward, and to plan the next iteration. It's a form of rolling-wave planning. The aim is to deliver the most important requirements within the budgeted cost and time, but maybe not all the requirements. For this process to work, it has to be highly collaborative. It's essential that project stakeholders are closely involved, particularly users.

With this approach, donors and stakeholders will be more confident approving the project because costs and schedules are defined up front and the overall risk is lower. Hopefully, donors and stakeholders will accept that they can't have everything, but what they do get will meet the main objectives of the project. So ultimately, the Agile approach to project management can result in a more successful outcome.

The essential element of the Agile process is to be able to prioritize the project's requirements into four categories of importance:

- Must have – these requirements are guaranteed to be delivered;
- Should have;
- Could have;
- Won't have at this time.

Agile focuses on small incremental changes. The challenge can be that the bigger picture can become lost and create uncertainty amongst stakeholders. Building consensus takes time and challenges many norms and expectations. Resource costs can be higher; for example, co-locating teams or investing in infrastructure for them to work together remotely. The onus can be perceived to shift from the empowered end-user to the empowered project team with a risk that benefits are lost because the project team is focused on the wrong things.

3.5.5 Adaptive and Implementation

It is during the Implementation phase when agility and adaptive management become paramount. In some cases, such as in humanitarian project, the context of the project may be continuously in flux, requiring rapid response to changing needs and evolving environments.

Decision gates

Decision gates in place during implementation help the project team to make the review of the project justification happen and establish a foundation for creating this process a habit throughout the project. Data and information from the monitoring and accountability systems should be fed into the Decision gate process, providing justification for taking the project forward as is or making changes based upon the data, information, and tolerances of the project manager.

Emergency Decision gate

Part of adapting to a changing environment might mean that the project is no longer relevant or able to operate within the current context. This is where Emergency Decision gates come into play. While this scenario is not desired or idea, the reality is that it may happen and may be best for stakeholders to close down the project rather than continue to the end. The decision to close a project is likely above the tolerance of a project manager but he or she will be involved in providing information on the context and making the decision in collaboration with the governance structure. She or he will also likely be responsible for communicating the decisions to stakeholders.

Issues and Change

Issues lead to change and may offer highlights into the gaps in the projects. Issues most certainly require that the response to the issue adapt to the context it happens in, frequently also requiring that the project team and manager consider the root cause of the issue in order to make sure it doesn't take place again – incorporating into the Lessons Learned.

Lessons Learned

One of the best ways to use lessons learned is through the Decision gate or other formal process where set times throughout the project are scheduled to conduct a reflective learning process with project team members and stakeholders. These sessions should be well-documented so that the learning can be incorporated into any iterative planning for the project and/or future project designs.

3.5.6 Adaptive and Closure

Evaluation and lessons learned provides the project manager and team with an assessment about the project and if the outcomes were achieved.

- Were changes made when and where appropriate, driven by information and data?
- Were lessons learned incorporated throughout the entire life of the project?
- How was the information from MEAL incorporated into the project change/decision gate process?

SECTION 4. ADAPTING THE PROJECT DPRO

How do you make Project DPro work for you?

Tools, techniques, methodologies and so on will not achieve anything if a project team cannot make them work in their actual project environment. This section looks at how to adapt various tools and techniques that have been presented in order to get them to work for the Project Manager and project implementation team.

4.1 Fundamentals of Adapting

There is no single road map to managing projects. Each project is unique – with its own specific objectives. Simply applying tools and techniques without thinking about context, resources, relationships and challenges will, at best, contribute to a robotic and "template-driven" project. Besides creating lots of unnecessary work, just adding tools and techniques without thinking through their justification and application is likely to confuse and demoralize project and implementing partner staff.

> Two Project Managers completed Project DPro training and gained clear knowledge and understanding of the methodology. Neither of their organizations, unfortunately, had much appreciation or understanding of project management. Upon returning to the workplace one Project Manager was told: "those Project DPro tools are OK, but we don't do it that way here". The other Project Manager was told by a superior: "you should decide what tools and techniques you want and implement them on your own".

While a project manager must be willing to take individual initiative despite organizational constraints, both of the scenarios described in the example above should be avoided whenever possible. Implementing Project DPro should involve assessing available tools and techniques, deciding which will be most useful in a particular situation, and then thinking through how these tools can be integrated into organizational processes and systems.

Whenever possible, Project Managers should engage with their organizations to discuss the following questions:

- Will a new tool compliment or replace an existing tool?
- How will information from a new tool fit into existing processes?
- Do we need to make changes to existing processes as a result of integrating a new tool or technique?

Even more practically, a Project Manager should look at all the tools and techniques and ask this question: "Can I implement this tool now – or do I want more organizational support"?

Table 41: Example of Adapting Project Management Tools illustrates an example of a tools adaptation plan. It is filled with sample data that denotes status and indicates if organizational changes will still be needed to bring about successful tool implementation.

Tool	Can I implement now?	Do I want more support?	What organizational changes must be made before we can properly adapt and use this tool?
WBS	Yes	No	Make sure my team and our collaborators contribute their specific expertise and detail
Network Diagrams	Yes	No	Make sure my team understands both the purpose and processes.
Project Charter	No	Yes	Encourage our organization to agree to an approved format.
RACI	Yes	No	Reach a consensus on "who should do what" at different levels of the project.
Change Control	Yes	Yes	Must integrate and link with our project governance system

Table 41: Example of Adapting Project Management Tools

4.2 Factors to Consider when Adapting the Project DPro

No project exists in a vacuum. Projects "live" within programs and portfolios. In addition, projects are managed within the context of organizational systems and donor structures. In one sense, these are the broader operating environment for projects. As a result, since all these factors impact the performance of projects, they should be taken into consideration when adapting the Project DPro to projects.

Program considerations: As stated earlier in this Guide, programs consist of a group of related projects that are managed in a coordinated way to obtain benefits and control not available through managing them individually. Program timescales are longer, and the outcomes are usually more complex with each individual project designed to make a contribution to goals. Clearly, in a well-managed program, there will be consistency of tools, methods and approaches.

Some NGOs have a Program Management Unit or Office (PMU or PMO) whose role is to ensure consistency of approaches, standards, capacity building, toolkits, and operating manuals. In such situations, Project Managers and their teams need to align with program unit guidelines, tools and approaches.

Also, with regard to the connection between programs and projects, NGOs in the international development sector tend to design large and complex projects when it might be more advisable to construct a program containing a range of smaller and simpler projects.

Systems Considerations: A Project Manager rarely gets the opportunity to influence the choice of organizational systems. Regardless, the Project Manager must make sure that the flow of information from and to the organization meets the needs of the project team.

The two examples below illustrate how a Project Manager must examine and understand organizational systems in order to work out ways for them to work for the benefit of the project.

Budgeting/financial reporting: Budgets in donor proposals are commonly in the form of activity budgets. Many NGOs, in reality, do not have financial systems that can produce reports on an activity basis – but use line item/account code reports. Under such scenario, a Project Manager must assure that the work needed to translate financial information from one format to another is planned and implemented in a timely way.

Budget currency and exchange rates: It is not unusual for a Project Manager to be informed that, "a project has a US$20,000 exchange rate loss, so it needs to do less activity to compensate." While hedging strategies can be used by organizations to help reduce the impact, exchange rate variance cannot be eliminated. In spite of this, a Project Manager can select and use the most appropriate management approaches to minimize shortfalls. Because the task of choosing budget currency is often made by staff in the finance or fundraising department, they often select the contract currency. If expenditure is in a different currency, it immediately complicates life for the project staff – finding themselves with a budget in one currency and expenditure in another. While not always possible, a Project Manager should insist that the budget and expenditure be done in the same currency. Even if the choice of currency is non-negotiable, the Project Manager can insist on application of an actual exchange rate throughout the life of project – rather than use of an easy-to-calculate book rate. While such management strategies won't mitigate currency fluctuations, they help reduce exchange rate variance.

Size, Complexity and Risk Considerations: Common sense dictates that a small, straightforward project does not require the same consideration as a million dollar, multi-location, multi-team project in a difficult, insecure environment with diverse stakeholders. Regardless of this knowledge, the factors associated with size, complexity and risk considerations are too often given insufficient attention by Project Managers and their organizations in the international development sector. Two important and related areas are cited below as examples:

Risk Planning and Management: A risk register is always useful. In a low-value, low-complexity project, a simple, qualitative risk register may be enough. In a project with a much higher risk profile, a manager will probably need a quantitative risk register. In addition, the project norms for using and modifying the risk register differ. Who can modify it? Who can suggest changes? When will the risk register be looked at? As with all the tools in Project DPro, the Project Manager needs to think about how best to use the tools and ensure that they help the project team.

Project Governance: One key area that will need attention in more complex projects is governance. Smaller, simpler projects might share a governance structure with a number of similar projects – perhaps under a Program Board or a Country Projects' Board or similar structure. A million dollar, multi-location, multi-team project will need its own Project Board with a Senior User, Senior Supplier and Project Executive representing their stakeholder voices and perspectives. The Project Board will need clear Terms of Reference and operating norms. Board Members must understand their roles and responsibilities. In addition, it may be necessary to change the profile of the Project Board over a longer project to ensure that the right perspectives are represented.

Learning and Competency Considerations: While the Project Manager is responsible for ensuring that staff members and implementing partners have the right competencies, including knowledge, attitudes and skills, the manager shouldn't expect to build capacities in to address all weaknesses right away. A key part of adapting the Project DPro will be assessing the current level of staff and implementing partner competencies and then promoting learning to increase capacities where gaps are identified. You

will find a Competency Assessment tool available at the PM4NGOs website that will help you to identify the areas in which you (and your organization) must focus on the development of competency areas that are required to better perform the project work.

For organizations implementing Project DPro, many of the learning and competency needs will likely have already been considered. However, a Project Manager still needs to confirm that all project staff and partners can correctly use each of the chosen tools in actual practice. Gaps that are identified in performance need to be addressed through training or other management action.

It is also important to make sure that everyone understands the tools selected to be incorporated in the organization projects (and processes). If, for example, a Project Manager tries to implement a Work Breakdown Structure (WBS) without making sure that each individual team member and implementing partner understands the basics, appreciates the value, and can actually use WBS in a real situation; then the implementation is likely headed for failure.

Performance Considerations: The Project Manager is not only responsible for ensuring that project staff become increasingly competent but, of ultimate importance, that on-the-job performance contributes to the organization's targeted impacts. It should be remembered that changes for organizations working in the International Development sector are usually targeted toward quality of life, wellbeing, sustainability, poverty reduction, empowerment social consciousness and/or environmental improvement areas. A Project DPro course must not be seen as a "one-off" event but should be the start of a dynamic process that transfers learning into improved performance and, most importantly, contributes to continuous project improvement. By linking Project DPro to project outcomes and demanding that staff be accountable for putting their learning into practice, Project Managers increase the chances of seeing changes that really matter and are at the very core of project objectives.

> One NGO office, after piloting a few Project DPro courses, decided that all Project DPro learning event participants would be required to develop an individual (also involving a project team where possible) Project DPro continued learning and implementation plan. Their plan template asked for the details of intended application of both PM knowledge and tools on-the-job over a 12-month period. A designated individual from the Project Management Unit has been assigned to communicate with each learner and his/her direct supervisor at 3-month intervals to gauge compliance, measure contribution to outcomes, and to collect/ share best practices. This NGO office is also offering ways for learners to gain virtual access (by telephone, email, social media etc.) to Project Management experts who can advise them on tool use/adaptation and other Project DPro deployment issues that may arise. They also decided to start small by phasing-in the introduction of PM tools in a manner that allows for hands-on experimentation, adaptation and contextualized learning. They decided that their starter 'toolbox' would include four PM tools that were deemed most critical for initial improvement. They chose the RACI, Risk Register, WBS and Issues Log.

In Summary: Adapting Project DPro, as detailed above, is indeed essential. However, one warning must be heeded: A project Manager's job should NOT be reduced to a set of rigid rules that are applied thoughtlessly across each and every project, program or portfolio. Remember, as stated earlier in this Guide, that Project Management is as much an 'art' as a 'science'. There will be circumstances where a PM tool or technique could be used but, for any number or good reasons, might NOT be the smartest choice. In other words, being too enthusiastic in requiring mandatory and uniform adoption of PM tools and techniques across all projects, programs or portfolios could be a huge mistake. Each and every Project Manager must learn to be disciplined and thoughtful – becoming proficient at analyzing each individual project before carefully and collaboratively selecting and adopting the best from Project DPro.

SECTION 5. CHANGES IN THE PROJECT DPRO GUIDE

The Project DPro Guide 2nd Edition incorporates learning from local and international organizations, from learners and trainers, and, most importantly, from practitioners. The guide has kept most of the 1st edition concepts, definitions and processes, but many improvements have been made:

- Since PM4NGOs has launched the Program DPro Guide, the Project DPro is now more focused in the activity and output levels.
- The Project Lifecycle has changed not only in number of phases, but also how it is presented, its principles, and the MEAL representation.
- Monitoring and Evaluation has incorporated Learning and Accountability and it is not considered a phase – it is a cross-cutting theme that you will see through all phases, principles, and chapters of this new edition.
- Disciplines (and their tools) have been incorporated into the phases, allowing readers to a more straight forward learning process.
- Project Management Principles are now aligned with the Program DPro. They are also more detailed and comprehensive when compared to the first edition.

A more detailed description of all changes in this 2nd edition can be found at mini-course available at the **DPro+** (www.dpro.plus), allowing professionals already certified to walk through changes between the two editions.

Annex I: Project DPro Competencies

Competencies are defined as integrated sets of skills, knowledge, attitudes and behaviors required to perform effectively in a given job, role or situation. Project Manager Competencies are organized in four areas: PM Technical, Leadership/Interpersonal, Personal/Self-Management and Development Sector Specific. For more information see section 1.2.6 of the guide.

You can use the Competencies to check your progress and help you develop a personal development plan in a three-step process:

Step 1: My Own Assessment. Sit down for a few minutes and go through the list below assessing your level between 1 and 4 in each of the 31 project manager competencies:

Level 1 - This concept is new or somewhat unfamiliar to me

Level 2 - I don't fully understand this concept yet and need more practice

Level 3 - I understand this concept and can demonstrate my understanding

Level 4 - I understand this concept so well that I can modify it, apply it in news ways, and teach it

Step 2: My Job Needs. Go through the competencies again with your manager or a colleague or mentor and assess what is required for the job you are doing:

Level 1 - My job does not require this competency

Level 2 - My job requires awareness of, but no need to apply this competency

Level 3 - My job requires knowledge and application of this competency

Level 4 - My job requires mastering this competency as well as modification for bespoke use and/or teaching to it to others

Step 3: Create Your Development Plan. This exercise will show the difference between your present competency level and what is required for the job so you can prioritize and plan your personal development.

Visit the PM4NGOs website or DPro+ platform to download a free Competencies Assessment tool.

PM Technical

This group of competencies are often referred to collectively as the 'science' behind project management. Can the project manager identify, select and employ the right tools and processes to ensure project management success?

1: Proactively manage scope

The ability to create and manage a list of specific project goals, deliverables and requirements based on the Project Proposal

2: Comprehensively identify the activities required for project success

The ability to determine the best means of satisfying the project requirements and to create a set of activities to deliver them within cost, time and quality constraints. Develop and agree a project budget

3: Manage the overall schedule to ensure work is on time

The ability to prepare and maintain schedules for activities and events for change initiatives, taking account of dependencies and resource requirements

4: Define and collect metrics to measure project progress

The ability to develop continuous monitoring and evaluation processes to measure all aspects of the project against its objectives

5: Identify, track, manage and resolve project issues

The ability to respond to issues that affect the project, and maintain an Issues Log

6: Proactively disseminate project information to all stakeholders

The ability to manage and communicate with stakeholders, taking account of their levels of influence and particular interests through the use of stakeholder management plans

7: Identify, manage and mitigate project risk

The ability to identify and monitor risks (threats and opportunities), to plan and implement responses to those risks, and maintain a Risk Register

8: Establish logistics systems

The ability to create and maintain a logistics system which supplies the correct resources and materials at the right time with budgetary constraints

9: Ensure that project deliverables are of acceptable quality

The ability to develop, maintain and apply quality management processes for change initiative activities and outputs

10: Identify if and when changes need to occur and the impact of those changes on the project

The ability to manage the process through which all requests to change the baseline scope of a project, program or portfolio are captured, evaluated and then approved, rejected or deferred.

11: Plan and manage the budget and the expenditure of the project

The ability to develop and agree budgets for the project and change initiatives, and to control forecast and actual costs against the budgets

Leadership and Interpersonal

This group of competencies are often referred to collectively as the ‘art’ of project management. For example, how does the project manager communicate, inspire, and resolve conflict?

12: Vision the ‘big picture’ of a project within an organization portfolio

The ability to see the “bigger picture”. To think at high level based around Theory of Change for the organization.

13: Champion the project (promoting buy-in)

The ability to manage stakeholders, taking account of their levels of influence and particular interests, and promote buy-in

14: Communicate vision – setting reasonable, challenging expectations

The ability to communicate the project's vision, inspire team members and keep them "on message".

15: Provide timely and helpful performance feedback to team members

The ability to help your team to develop their skills, knowledge and experience by constructive feedback and (possibly) mentoring. Your team is your project's greatest asset!

16: Facilitate a productive team environment

The ability to select, develop and manage teams and the ability to be a team player

17: Communicate proactively (verbal and written), including active listening

The ability to communicate clearly, accurately and precisely to team members and stakeholders, and, when communicating verbally, to fully concentrate on what is being said rather than just passively 'hearing' the message of the speaker

18: Motivate team members to willingly follow direction and achieve goals

The ability to empower and inspire others to deliver successful change initiatives

Personal and Self-Management

The project manager's ability to self-manage. For example, can the project manager effectively prioritize, manage time and organize work? This group of competencies check the project manager's ability to self-manage.

19: Organizational skills

The ability to create and keep deadlines; delegate; set goals & meet goals; make timely decisions; manage appointments; and, make and manage schedules

20: Attention to detail

To ability to be thorough and accurate when accomplishing a task through concern for all the areas involved.

21: Ability to multi-task

The ability to to calmly and efficiently perform multiple tasks at the same time

22: Logical thinking

The ability to think in a disciplined manner using facts and evidence to come up with a solution

23: Analytical thinking

The ability to work systematically and logically to resolve problems, identify causation and anticipate unexpected results. To manage issues by drawing on own experience and knowledge and call on other resources as necessary

24: Self-discipline

The ability to stick to one's convictions and rule your own conduct

25: Time management

The ability to know where you are spending your time and how to spend it efficiently

Development Sector Specific

This is the ability to apply the technical, leadership/interpersonal and personal/self-management competencies in the context of development projects. For example, can the project manager identify, select and employ the right tools and processes that are unique to the development sector?

26: Understand development sector values and paradigms (or mode of operation)

The ability to understand how the development sector works overall and for your organization in particular

27: Understand the different stakeholders involved in development projects

28: Understand and navigate complex development environments

The ability to understand the often-complex relationships in a development project and to interact with all stakeholders effectively at an appropriate level

29: Work effectively with an array of implementing partners

30: Cope with the unique pressures of development environments

31: Exhibit cultural sensitivity

The ability to work in multi-cultural teams, being sympathetic and aware of local customs

Annex II: Project DPro Certifications

In an industry that relies upon projects to complete its work, a certification helps ensure that project managers are ready to effectively manage their projects around the world. The PM4NGOs certifications are internationally recognized and serve as an evidence of acquired skills and competences.

PM4NGOs offers a two-level Project DPro certification: Foundation and Practitioner.

Project DPro Foundation

The Project DPro Foundation certification is intended for those new to project management, those with experience working in a project-based environment who are looking for a refresher, and for experienced project managers who are new to working in the international development sector. The goal of the Project DPro Foundation certification is to:

- confer a professional certification status for project managers in the sector
- provide certification and learning resources that are comprehensive, accessible and appropriate to professionals working in the sector
- integrate content that is contextualized to the international development sector with other internationally-recognized certifications.

The examination is available on-line via the APMG International and requires candidates to demonstrate that they know and understand content of the Project Management for Development Professionals Guide (Project DPro Guide). The exams are multiple choice with 75 questions. The pass mark is 65% – or 49 correct questions. There is no 'negative' marking so an incorrect answer does not lose you marks.

The learning objectives for the Project DPro Foundation examination are found in the Annex III.

Project DPro Practitioner

The Project DPro Level Practitioner certification is a significantly more challenging assessment of your understanding of the project management role in the development sector, and your continuing professional development. It suits those with experience working in a project-based environment who wish to demonstrate their commitment to personal professional development. The goal of the Project DPro Practitioner certification is to:

- provide a second level contextualized project management credential for the development sector.
- provide a continuing professional development platform in which professionals will develop their project management skills and knowledge in the development sector.
- provide a platform from which development practitioners can begin to pursue an internationally-accredited professional qualification in project management.

Note: The new Project DPro Practitioner process is not an examination as the Foundation level, but a set of learning activities and evidence-based professional development. For more information about the Project DPro certifications, visit the PM4NGOs website (www.pm4ngos.org) and the DPro+ platform (www.dpro.plus).

Annex III: Project DPro Learning Outcomes

Syllabus Area Code DS		Syllabus Area: Projects in the Development Sector	Reference	Syllabus full code
Topic	Subtopic			
		Understand the Projects in the Development Sector		
01	01	Define project management terms in the context of the international development context.	1.1.2	DS.1.1
01	02	Explain how the culture of projects in the development sector differs from that in other sectors.	1.1.3	DS.1.2
01	03	Explain the importance and accountability of project management in the development sector	1.1.4	DS.1.3
		Know fact, terms and concepts related to the Projects in the Development Sector topic.		
02	01	Define Project Management	1.2.1	DS.2.1
02	02	Identify the three sides of the triple constraint triangle as defined in the Project DPro	1.2.2	DS.2.2
02	03	Explain the relationship between the sides of a triple constraint triangle and the implications of its changes on project management.	1.2.2	DS.2.3
02	04	Define and identify the differences between projects, programs, portfolios	1.2.3	DS.2.4
02	05	Identify the advantages of managing a group of projects within the context of a program	1.2.3	DS.2.5
02	06	Identify the different origins of a project in the development sector	1.2.4	DS.2.6
02	07	Recall the Principles of Project Management	1.2.5	DS.2.7
02	08	Recall the competencies of project managers in the development sector (art and science)	1.2.6	DS.2.8
02	09	Understand the differences in project management competencies required as the size, complexity and risk of a project scenario expands	1.2.6	DS.2.9
02	10	Map the skills of project managers in the development sector	1.2.6	DS.2.10
02	11	Recall the responsibilities of project managers in the development sector	1.1.3, 1.1.4	DS.2.11

Syllabus Area Code PM		Syllabus Area: The Project DPro Project Phase Model	Reference	Syllabus full code
Topic	Subtopic			
		Know fact, terms and concepts related to the Project DProject Phase Model.		
01	01	Identify the five phases in the Project DPro Project Phase Model.	1.2.8	PM.1.1
01	02	Recall terms, facts and concepts related to the five phases of the generic project life cycle in the international development sector	1.2.8	PM.1.2
01	03	Define decision gates, including the difference between internal, external, and emergency gates	1.2.9	PM.1.3
01	04	Recall examples of decision gates in the life of a project	1.2.9	PM.1.4
01	05	Explain the benefits of managing decision gates in the context of project management.	1.2.9	PM.1.5
01	06	Define Emergency Decision Gates	1.2.9	PM.1.6
		Understand the Project DPro Project Phase Model		
02	01	Explain the ways that project phases in the Project DPro Project Phase Model interact with each other.	1.2.8	PM.2.1
02	02	Explain the MEAL concept in comparison to the previous MEC phase	1.2.8	PM.2.2
02	03	Understand the purpose and benefits of managing decision gates through the Project DPro Project Life Cycle.	1.2.9	PM.2.3

Syllabus Area Code ID		Syllabus Area: Project Identification and Definition	Reference	Syllabus full code
Topic	Subtopic			
		Know fact, terms and concepts related to the Project Identification and Definition Phase		
01	01	Identify the purposes of the Identification and Definition Phase	2.1.1	ID.1.1
01	02	Explain the variations in the opportunity to cost-effectively manage change through the life of a project	2.1.1	ID.1.2
01	03	Identify the key outputs of the Identification and Definition Phase	2.1.2	ID.1.3
01	04	Identify the inputs of the Identification and Definition Phase	2.1.5	ID.1.4
01	05	Identify the main characteristics of the Identification and Definition Phase (who is involved, what does it mean in practice)	2.1.3, 2.1.4	ID.1.5

Syllabus Area Code ID		Syllabus Area: Project Identification and Definition (continuing)	Reference	Syllabus full code
Topic	Subtopic			
		The Project Identification and Definition Processes and Tools		
		Definition of Needs		
02	01	Understand the concept and factors to consider on Definitions of Needs	2.1.6	ID.2.1
02	02	Identify the purposes of data collection and data analysis	2.1.6	ID.2.2
02	03	Identify and understand methodologies, approaches and tools for data collection	2.1.6	ID.2.3
02	04	Identify differences between primary data (qualitative and quantitative) and secondary data.	2.1.6	ID.2.4
02	05	Identify differences between the four categories of social needs	2.1.6	ID.2.5
02	06	Explain the importance of triangulation in the Project Identification and Definition Phase	2.1.6	ID.2.6
		Needs Analysis		
03	01	Identify and define the components of needs and data analysis: current state analysis, stakeholder analysis, and future state analysis	2.1.6	ID.3.1
03	02	Understand the six categories of stakeholders	2.1.6	ID.3.2
03	03	Explain the purpose and construct of stakeholder analysis tools, including Venn diagrams and Stakeholder Analysis Matrix	2.1.6	ID.3.3
03	04	Define the terms related to needs analysis, including problem trees, objective trees, and alternatives trees	2.1.6	ID.3.4
03	05	Understand the relationship between a problem tree and an objective tree	2.1.6	ID.3.5
03	06	Identify and explain the levels of hierarchy in the problem tree process	2.1.6	ID.3.6
03	07	Explain the categories of criteria that determine what is included in project interventions	2.1.6	ID.3.7
		Project Intervention Logic		
04	01	Identify the purposes of the logical framework	2.1.6	ID.4.1
04	02	Identify and define Logical Framework and its components (activities, outputs, outcomes, goals)	2.1.6	ID.4.2
04	03	Understand the vertical and horizontal logics of the Project Logframe	2.1.6	ID.4.3
04	04	Understanding the definition of Assumptions, Indicators, and Means of Verification	2.1.6	ID.4.4

Syllabus Area Code ID		Syllabus Area: Project Identification and Definition (continuing)	Reference	Syllabus full code
Topic	Subtopic			
04	05	Define the 5 characteristics of a SMART indicator	2.1.6	ID.4.5
		High-level analyses		
05	01	Understand the benefits of a high-level analyses in the Identification and Definition Phase	2.1.6	ID.5.1
05	02	Identify the categories of risk assessment at the high-level human resources analysis	2.1.6	ID.5.2
05	03	Understand the project team needs at the high-level human resources analysis	2.1.6	ID.5.3
05	04	Define Roles and Responsibilities, Level of Effort, and Capacity Requirements aspects	2.1.6	ID.5.4
05	05	Identify and understand the 3 components that comprise supply chain management	2.1.6	ID.5.5
05	06	Understand the benefits of the Financial and Sustainability high-level analyses	2.1.6	ID.5.6
05	07	Understand the relationship between project and Theory of Change	2.1.6	ID.5.7
05	08	Identify and understand the concepts of Project Charter and Project Proposal	2.1.6	ID.5.8

Syllabus Area Code SU		Syllabus Area: Project Set Up	Reference	Syllabus full code
Topic	Subtopic			
		Know fact, terms and concepts related to the Project Set Up area.		
01	01	Know the objectives of the Project Set Up phase	2.2.1	SU.1.1
01	02	Identify the key outputs of the Set Up Phase	2.2.2	SU.1.2
01	03	Identify the inputs of the Set Up Phase	2.2.5	SU.1.3
01	04	Identify the main characteristics of the Set Up Phase (who is involved, what does it mean in practice)	2.2.3, 2.2.4	SU.1.4
01	05	Identify the relationship between Decision Gates and Stages	224	SU.1.5
		The Project Set Up Processes and Tools		
		Risk Analysis		
02	01	Define terms related to risk management, including positive risks, negative risks, risk register, risk assessment matrix and risk tolerances	2.2.6	SU.2.1
02	02	Explain the significance of probability and impact in the context of risk management.	2.2.6	SU.2.2

02	03	Identify and understand the five-step risk management process	2.2.6	SU.2.3
02	04	Identify and understand the four risk response strategies.	2.2.6	SU.2.4
02	05	Explain the iterative nature of risk management and its importance throughout the entire life of the project.	2.2.6	SU.2.5
02	06	Understand the content and structure of a risk register	2.2.6	SU.2.6
02	07	Explain the purpose, structure and content of a Risk Assessment Matrix	2.2.6	SU.2.7
		Stakeholder Engagement		
03	01	Know that engagement to the Stakeholders is essential and requires planning and execution.	2.2.6	SU.3.1
03	02	Explain the importance of establishing a project governance structure	2.2.6	SU.3.2
03	03	Identify and understand the three perspectives that should be represented in a project board.	2.2.6	SU.3.3
03	04	Explain the responsibilities of a project sponsor and a project board	2.2.6	SU.3.4
03	05	Explain the connection between project tolerances and project governance	2.2.6	SU.3.5
03	06	Identify and understand the six areas of project tolerances	2.2.6	SU.3.6
03	07	Understand the purpose and characteristics of the Planning Framework	2.2.6	SU.3.7
03	08	Understand the purpose and characteristics of the MEAL Framework	2.2.6	SU.3.8
03	09	Understand the purpose of the Project Charter	2.2.6	SU.3.9
03	10	Identify the purposes of project launch communications	2.2.6	SU.3.10

Syllabus Area Code PP		Syllabus Area: Project Planning	Reference	Syllabus full code
Topic	Subtopic			
		Know fact, terms and concepts related to the Project Planning area.		
01	01	Recall facts terms and concepts related to the importance and timing of the project implementation plan.	2.3.1	PP.1.1
01	02	Compare and contrast project logframes, proposals and implementation plans	2.3.1	PP.1.2
01	03	Identify the key outputs of the Project Planning Phase - seven components of a comprehensive project plan.	2.3.2	PP.1.3
01	04	Identify the inputs of the Project Planning Phase	2.3.5	PP.1.4

01	05	Identify the main characteristics of the Project Planning Phase (who is involved) - participatory process	2.3.3	PP.1.5
01	06	Understand the Accountability and Control Mechanisms in the Project Planning Phase	2.3.4	PP.1.6
01	07	Understand the advantages of rolling wave planning and decision gates in the Project Planning Phase	2.3.4	PP.1.7
		The Project Planning Processes and Tools		
		Schedule planning		
02	01	Know the 5 steps in schedule planning.	2.3.6	PP.2.1
02	02	Understand the difference between product scope and project scope.	2.3.6	PP.2.2
02	03	Understand that the scope of the project must be confirmed and must be comprehensive and detailed.	2.3.6	PP.2.3
02	04	Recall the facts, terms and concepts related to activity definition, including product scope, project scope, and WBS	2.3.6	PP.2.4
02	05	Understand the composition of a WBS (work breakdown structure).	2.3.6	PP.2.5
02	06	Explain the advantages of the two WBS formats.	2.3.6	PP.2.6
02	07	Explain the relationship between activity sequencing and resource estimating	2.3.6	PP.2.7
02	08	Understand the relationship between the project constraint triangle and schedule development	2.3.6	PP.2.8
02	09	Define the terms related to budget planning, including activity-based budget, direct and indirect work costs.	2.3.6	PP.2.9
02	10	Define the three approaches to making project estimates	2.3.6	PP.2.10
02	11	Understand the advantages and disadvantages of the three estimation techniques	2.3.6	PP.2.11
02	12	Understand the purpose, structure and content of a network diagram - Activity Duration Estimating	2.3.6	PP.2.12
02	13	Understand the concept and purpose of the Critical Path	2.3.6	PP.2.13
02	14	Understand the purpose, structure and content of a Gantt Chart - Schedule Development	2.3.6	PP.2.14
		MEAL planning		
03	01	Recall the facts, terms and concepts related to the levels of project MEAL and their connection to the project logical framework.	2.3.6	PP.3.1
03	02	Identify the concept and differences between project monitoring and project evaluation	2.3.6	PP.3.2
03	03	Recall facts terms and concepts related to different evaluation approaches	2.3.6	PP.3.3

03	04	Identify and understand the components of an evaluation table	2.3.6	PP.3.4
03	05	Understand the concepts and importance of the Accountability and Learning	2.3.6	PP.3.5
03	06	Recall facts, terms and concepts related to the project MEAL plan	2.3.6	PP.3.6
03	07	Identify and understand the six essential elements of a MEAL Plan	2.3.6	PP.3.7
		Internal Controls, Communication, and Stakeholder Engagement Planning		
04	01	Identify and understand the components and the benefits of well-managed internal control systems	2.3.6	PP.4.1
04	02	Communication and Stakeholder Engagement Planning	2.3.6	PP.4.2
04	03	Understand the components of a communication plan.	2.3.6	PP.4.3
04	04	Explain the purpose and construct of stakeholder engagement strategy	2.3.6	PP.4.4
04	05	Know the components of a RACI chart.	2.3.6	PP.4.5
04	06	Understand the four key roles identified in a RACI Matrix	2.3.6	PP.4.6
		Supply Chain Planning		
05	01	Identify and understand the 3 components of supply chain	2.3.6	PP.5.1
05	02	Identify and understand the 3 steps in procurement management	2.3.6	PP.5.2
05	03	Identify and understand the 2 elements of logistics management:	2.3.6	PP.5.3
05	04	Understand the concept, characteristics, and categories of Assets	2.3.6	PP.5.4
		Human Resources Planning		
06	01	Recall the concepts and purpose of Human Resources Planning	2.3.6	PP.6.1
		Stage Planning		
06	02	Recall the concepts and purpose of Stages and Decision Gates	2.3.6	PP.6.2
		Sustainability and Closure Planning		
07	01	Understand the definitions and importance of Sustainability and Closure Planning	2.3.6	PP.7.1
07	02	Identify the components of a Transition Planning Matrix	2.3.6	PP.7.2
07	03	Identify the actions for an efficient and compliant Closure Planning	2.3.6	PP.7.3

Syllabus Area Code PI		Syllabus Area: Project Implementation	Reference	Syllabus full code
Topic	Subtopic			
		Know fact, terms and concepts related to the Project Implementation Phase area.		
01	01	Identify the key outputs of the Implementation Phase	2.4.2	PI.1.1
01	02	Identify the inputs of the Implementation Phase	2.4.5	PI.1.2
01	03	Identify the main characteristics of the Implementation Phase (who is involved, what does it mean in practice)	2.4.3	PI.1.3
		The Implementation Processes and Tools		
		Managing People		
02	01	Identify the activities conducted to manage people during project implementation	2.4.6	PI.2.1
		Managing the Project Schedule		
02	02	Define processes used to manage schedule, including critical paths, project float, fast tracking and crashing.	2.4.6	PI.2.2
		Managing the Budget		
02	03	Define the terms related to manage budgets, including variance and Earned Value Analysis	2.4.6	PI.2.3
02	04	Explain the importance of monitoring cash flow	2.4.6	PI.2.4
		Managing Risks		
02	05	Understand the need of reviewing and updating the Risk Register	2.4.6	PI.2.5
		Managing Issues		
02	06	Understand the importance of issue management in the implementation of development projects.	2.4.6	PI.2.6
02	07	Identify and understand the four basic processes in the issue management process	2.4.6	PI.2.7
02	08	Explain the sequence and relationship between the four basic processes of issues management	2.4.6	PI.2.8
		Monitoring, Evaluation, Accountability, and Learning (MEAL)		
02	09	Recall the concept and use of indicators to measure the progress - performance tracking	2.4.6	PI.2.9
02	10	Identify and understand the four primary components of Accountability	2.4.6	PI.2.10
		Managing Change		
02	11	Recall facts, terms and concepts related to change management	2.4.6	PI.2.11

02	12	Understand the purpose of a process map for change management, and its logic	2.4.6	PI.2.12
		Managing the Supply Chain		
02	13	Identify alternatives for identifying providers in the procurement process	2.4.6	PI.2.13
02	14	Explain the 2 elements of logistics management.	2.4.6	PI.2.14
02	15	Explain the 4 elements of asset management.	2.4.6	PI.2.15
		Project Sustainability Plan		
02	16	Understand the aspects to consider on a Project Sustainability Plan	2.4.6	PI.2.16

Syllabus Area Code PC		Syllabus Area: Project Closure	Reference	Syllabus full code
Topic	Subtopic			
		Know fact, terms and concepts related to the Project Closure Phase area.		
01	01	Recall the five options for project closure	2.5.1	PC.1.1
01	02	Identify the key outputs of the Closure Phase	2.5.2	PC.1.2
01	03	Identify the inputs of the Closure Phase	2.5.5	PC.1.3
01	04	Identify the main characteristics of the Closure Phase (who is involved, what does it mean in practice)	2.5.4	PC.1.4
		The Project Closure Processes and Tools		
		Sustainability Plan and Handover		
02	01	Explain the purpose and contents of a Sustainability Plan and Handover	2.5.6	PC.2.1
		Reporting		
02	02	Explain the 3 formats of project Reporting		PC.2.2
		Project Closure Procedures		
02	03	Recall activities related to the administrative, contract and financial closure of projects	2.5.6	PC.2.3
02	04	Identify the two-step process for verifying project deliverables.	2.5.6	PC.2.4
		Project Evaluations and Lessons Learned		
02	05	Differentiate between project After Action Reviews and end of project evaluations	2.5.6	PC.2.5
02	06	Identify and understand the 4 key questions of Lessons Learning process	2.5.6	PC.2.6

Syllabus Area Code WG		Syllabus Area: Principle: Well-Governed	Reference	Syllabus full code
Topic	Subtopic			
		Understand the main concepts and relationships of Well-Governed Principle		
01	01	Understand what the Well-Governed Principle is and why it matters	3.1.1	WG.1.1
01	02	Identify the relationship between Well-Governed and the Identification and Definition Phase	3.1.2	WG.1.2
01	03	Identify the relationship between Well-Governed and the Set Up Phase	3.1.3	WG.1.3
01	04	Identify the relationship between Well-Governed and the Planning Phase	3.1.4	WG.1.4
01	05	Identify the relationship between Well-Governed and the Implementation Phase	3.1.5	WG.1.5
01	06	Identify the relationship between Well-Governed and the Closure Phase	3.1.6	WG.1.6

Syllabus Area Code PA		Syllabus Area: Principle: Participatory	Reference	Syllabus full code
Topic	Subtopic			
		Understand the main concepts and relationships of Participatory Principle		
01	01	Understand what the Participatory Principle is and why it matters	3.2.1	PA.1.1
01	02	Identify the relationship between Participatory and the Identification and Definition Phase	3.2.2	PA.1.2
01	03	Identify the relationship between Participatory and the Set Up Phase	3.2.3	PA.1.3
01	04	Identify the relationship between Participatory and the Planning Phase	3.2.4	PA.1.4
01	05	Identify the relationship between Participatory and the Implementation Phase	3.2.5	PA.1.5
01	06	Identify the relationship between Participatory and the Closure Phase	3.2.6	PA.1.6

Syllabus Area Code CO		Syllabus Area: Principle: Comprehensive	Reference	Syllabus full code
Topic	Subtopic			
		Understand the main concepts and relationships of Comprehensive Principle		

01	01	Understand what the Comprehensive Principle is and why it matters	3.3.1	CO.1.1
01	02	Identify the relationship between Comprehensive and the Identification and Definition Phase	3.3.2	CO.1.2
01	03	Identify the relationship between Comprehensive and the Set Up Phase	3.3.3	CO.1.3
01	04	Identify the relationship between Comprehensive and the Planning Phase	3.3.4	CO.1.4
01	05	Identify the relationship between Comprehensive and the Implementation Phase	3.3.5	CO.1.5
01	06	Identify the relationship between Comprehensive and the Closure Phase	3.3.6	CO.1.6

Syllabus Area Code IN		Syllabus Area: Principle: Integrated	Reference	Syllabus full code
Topic	Subtopic			
		Understand the main concepts and relationships of Integrated Principle		
01	01	Understand what the Integrated Principle is and why it matters	3.4.1	IN.1.1
01	02	Identify the relationship between Integrated and the Identification and Definition Phase	3.4.2	IN.1.2
01	03	Identify the relationship between Integrated and the Set Up Phase	3.4.3	IN.1.3
01	04	Identify the relationship between Integrated and the Planning Phase	3.4.4	IN.1.4
01	05	Identify the relationship between Integrated and the Implementation Phase	3.4.5	IN.1.5
01	06	Identify the relationship between Integrated and the Closure Phase	3.4.6	IN.1.6

Syllabus Area Code AP		Syllabus Area: Principle: Adaptive	Reference	Syllabus full code
Topic	Subtopic			
		Understand the main concepts and relationships of Adaptive Principle		
01	01	Understand what the Adaptive Principle is and why it matters	3.5.1	AP.1.1
01	02	Identify the relationship between Adaptive and the Identification and Definition Phase	3.5.2	AP.1.2

01	03	Identify the relationship between Adaptive and the Set Up Phase	3.5.3	AP.1.3
01	04	Identify the relationship between Adaptive and the Planning Phase	3.5.4	AP.1.4
01	05	Identify the relationship between Adaptive and the Implementation Phase	3.5.5	AP.1.5
01	06	Identify the relationship between Adaptive and the Closure Phase	3.5.6	AP.1.6

Syllabus Area Code AD		Syllabus Area: Adapting the Project DPro	Reference	Syllabus full code
Topic	Subtopic			
		Know fact, terms and concepts related to the Adapting the Project DPro syllabus area.		
01	01	Recall the principles of adaptation	4.1	AD.1.1
		Understand the Adapting the Project DPro syllabus area.		
02	01	Understand factors to consideration when adapting Project DPro to projects	4.2	AD.2.1
02	02	Understand the role of systems in adapting Project DPro tools and techniques	4.2	AD.2.2
02	03	Understand the relationship between a project's risk profile and the choice of Project DPro tools and techniques	4.2	AD.2.3
02	04	Appreciate the considerations needed when implementing projects using Project DPro through implementing partners	4.2	AD.2.4

Annex IV: Glossary of Terms

Activities	The actions taken through which inputs (financial, human, technical, material and time resources) are mobilized to produce deliverables (training, constructing, etc.) of a project for which staff can be held accountable and which, when aggregated, produce outputs
Asset-based	Methodology that seeks to uncover and highlight the strengths within communities as a means for sustainable development
After Action Review	A simple, quick and versatile learning activity that can be used to identify and record lessons and knowledge arising out of a project
Assumptions	Hypotheses about necessary conditions, both internal and external, identified in a design to ensure that the presumed cause-effect relationships function as expected and that planned activities will produce expected results
Baseline	A factual point of reference about the conditions or performance prior to the commencement of an intervention – necessary to serve as the basis for project monitoring, evaluation and control
Bottom-Up Estimating	This estimating technique starts by consulting the same people responsible for project tasks and aggregating their estimates into a comprehensive global budget.
Capacities	Abilities, skills, understandings, attitudes, values, relationships, behaviors, motivations, resources and conditions that enable individuals, organizations, networks/sectors and broader social systems to carry out functions and achieve objectives over time
Certificate	A document issued to a person upon successful completion of a course of study
Competencies	Integrated sets of skills, knowledge, attitudes and behaviors required to perform effectively in a given job, role or situation
Concept Note	A high-level overview of a project written to solicit feedback before committing resources to develop an expansive proposal
Crashing	Adding additional resources to the project to accelerate the progress of the schedule

Credential	Proof of qualification, competence or clearance that is attached to a person
Critical Path	The sequence of activities that represents the longest path between the start of the project and the project's end
Decision Gate	Major control points used to conclude and accept the products for a particular phase of the project and to move on to the next phase
Decompose	A technique to separate or break down project deliverables into smaller elements, components or parts
Development Organization	A spectrum of organizations that fall within a wide continuum of relief and development in their projects and practices: one end of the continuum facilitates long-term, participatory development programs in areas such as environment, health, education and agriculture; and the other end of the continuum involves more directly implementing quick and temporary relief projects for people facing starvation, homelessness or destitution because of sudden natural disasters or conflict
Fast Tracking	Accelerating the project schedule by performing activities that would normally be completed in sequence and instead completing them in parallel.
Float (or Slack)	The amount of time that a task in a project network diagram can be delayed by without causing a delay to the project completion date.
Gantt Chart	A bar chart that graphically represents the schedule of project activities
Goal	The highest-level desired end result or impact (transformation, sustainability, livelihood, well-being etc.) to which the project contributes – the ultimate objective in many logical frameworks
Impact	The significant effect or longer-term result (identified with the outcomes and goal levels in many logical frameworks)
Inputs	The resources the project must mobilize and apply to project activities (human and financial resources, equipment, etc.)
Issue	A risk that has now occurred. It can take the form of an unresolved decision, situation or problem that will significantly impact the project
Issue Control Log	An accessible document or database that summarizes the issues, their current status, and who is currently responsible for resolution

Iteration	The act of repeating a process for a second, third or more times to achieve the desired goal, target or result
Logistics	The process of planning, implementing and controlling the efficient, cost-effective flow and storage of raw materials, in-process inventory, finished goods and related information from point of origin to point of consumption for the purpose of conforming to customer requirements.
MEAL	Monitoring, Evaluation, Accountability, and Learning
NGO	Non-Government Organizations – acronym and term used to generally refer to nonprofit organizations in the development and humanitarian sectors.
Network Diagram	Pictorial summary of the decisions and flows that make up a procedure or process from beginning to end
Outcomes	What the project expects to accomplish at the beneficiary level (e.g. use of knowledge and skills in actual practice over time; transportation of goods on constructed roads over time) and contribute to population-level changes (reduced malnutrition, improved incomes, improved yields, etc.) that aggregate and help bring about accomplishment of goals and impact over time
Outputs	The tangible deliverables resulting from project activities, including products, goods, services and changes (e.g. people trained with increased knowledge and skill; quality roads built) that aggregate and contribute to enabling desired outcomes
Parametric Estimating	Using historical data from similar projects to establish estimates for project activities. This estimating technique relies less on people and more on statistical data.
PM	Acronym used to represent “Project Management”
Procurement	Planning and implementing all aspects of resource acquisition, including specifications development, supplier market research, negotiations, buying activities, contract administration and inventory control
Product Scope	All of the required deliverables of the project, meeting the agreed specification. (What is going to be delivered)
Program	A group of related projects managed in a coordinated way to obtain benefits and control not available through managing them individually

Project	A set of activities meeting agreed objectives in a specific period of time with an agreed set of resources
Project Charter	A document that describes the project at a high level of detail and which is used to authorize the Project Manager to begin work
Project Control	The process of measuring and reporting on progress and taking corrective action to ensure project objectives are met
Project Implementation Plan	A comprehensive and logical presentation of the detailed project model to help ensure it will arrive on time, on scope, on budget
Project Management	Planning, organizing and managing resources to bring about the successful completion of specific project goals, outcomes and outputs
Project Manager	A professional in the field of project management who has the responsibility to plan, implement and close projects to bring about the successful completion of specific project goals, outcomes and outputs
Project Proposal	A clear and concise offer that seeks approval from a potential funder for delivery of products and/or services in response to donor requests or anticipated needs
Project Scope	All of the work required to deliver the product scope. (How the deliverables will be created and delivered)
Risk	The potential effect of uncertainty on project objectives
Top-Down Estimating	This estimating technique relies on a relatively small group of “experts”, who work to establish a global project estimate that is then decomposed into smaller work packages.
Work Breakdown Structure (WBS)	A hierarchical task list created by decomposing the project into components and the breakdown of the project process into increasingly detailed tasks

Annex V: List of Figures

Figure 1: Project DPro Professionals per year – cumulative 13
Figure 2: Project Challenges 17
Figure 3: Triple Constraint Triangle 21
Figure 4: Classification of Project Constraints 22
Figure 5: Projects, Programs, and Portfolio 23
Figure 6: Principles of Project Management 27
Figure 7: Balancing the Art and Science of Project Management 30
Figure 8: Project DPro Competency Model 30
Figure 9: Example Project Management Lifecycle Source: wwf.panda.org 33
Figure 10: Project DPro Phase Model 34
Figure 11: Project DPro Phase Interaction 35
Figure 12: Decision gates in the Project DPro Phase Model 37
Figure 13: Identification and Definition Internal Decision Gate Examples 39
Figure 14: Project DPro Phase Model – Identification and Definition 41
Figure 15: Opportunity to Cost Effectively Manage Change 43
Figure 16: Bradshaw's categories of social needs 52
Figure 17: Delta River Venn Diagram – From the families' perspective 56
Figure 18: Delta River Problem Tree 58
Figure 19: Delta River Objectives Tree 59
Figure 20: Delta River Solutions / Alternatives Tree 60
Figure 21: Project Human Resources Needs 71
Figure 22: Delta River Program Theory of Change 74
Figure 23: Project DPro Phase Model – Set Up 77
Figure 24: Project Stages 80
Figure 25: Board Composition Examples 89
Figure 26: Stage map for the Delta River Latrine Project 92
Figure 27: Project DPro Phase Model – Planning 97
Figure 28: Schedule planning Five Steps 104
Figure 29: Examples issues on project scope definition 106
Figure 30: WBS Example – Graphic Format 107
Figure 31: WBS Example – Indirect Work 108

Figure 32: WBS Work Package Latrine Building Project 109
Figure 33: Latrine Example 110
Figure 34: Using a Network Diagram to Sequence Latrine Construction Activities 110
Figure 35: Network Diagram for the Delta River Project Latrines Component 114
Figure 36: Network Diagram for the Delta River Project Latrines Component – Critical Path 115
Figure 37: Gantt Chart for Latrines Project (limited build out) 117
Figure 38: Stage Plan 128
Figure 39: Project DPro Phase Model – Implementation 131
Figure 40: Network Diagram for the Delta River Project Latrines Component 135
Figure 41: Fast Tracking the Latrine Project Schedule 135
Figure 42: Crashing the Latrine Project Schedule 136
Figure 43: Illustrative Process Map for a Project Change Request 147
Figure 44: Project DPro Phase Model – Closure 152
Figure 45: Closure scenarios 154
Figure 46: After Action Review 163
Figure 47: Principles of Project Management 165
Figure 48: Plan, Do, Learn, Review Process 181

Annex VI: List of Tables

Table 1: Project, Program, and Portfolio Management Summary 25
Table 2: Project DPro Competency Model Characteristics 32
Table 3: Delta Rive Decision Gates Examples 39
Table 4: Delta River Latrine Building Project Data Collection Planning 48
Table 5: Secondary Data strengths and weaknesses 49
Table 6: Primary Quantitative Data strengths and weaknesses 49
Table 7: Primary Qualitative Data strengths and weaknesses 49
Table 8: Types of Data 50
Table 9: Stakeholder Categories 55
Table 10: Stakeholder Analysis Matrix 57
Table 11: Scope Analysis 61
Table 12: Vertical Logic of the LogFrame 63
Table 13: Logframe Descriptions 63
Table 14: Horizontal Logic of the LogFrame 64
Table 15: Assumptions Example 1 65
Table 16: Assumptions Example 2 65
Table 17: Indicator Guidelines by Logical Framework Level 66
Table 18: Delta River Latrine Building Project Logframe 68
Table 19: Risk Assessment Matrix 83
Table 20: Risk Register – Delta River Latrine Project 86
Table 21: Stakeholder Engagement Strategy 87
Table 22: Differences between Project Proposal and Project Implementation Plan 98
Table 23 Product Scope and Project Scope 105
Table 24: Activity Based Budget 114
Table 25: The What, Why, When and How of Monitoring 118
Table 26: The What, Why, When and How of Evaluation 119
Table 27: Summary Evaluation Table 119
Table 28: MEAL Six Essential Elements 121
Table 29: Communication Plan 123
Table 30: Stakeholder Engagement Strategy 123
Table 31: Delta River RACI Matrix 125

Table 32: UNDP Asset Categories 126
Table 33: Transition Planning Matrix 129
Table 34: Illustrative Budget for a Six-Month Project (including actual costs through Month 3) 137
Table 35: Example of a 6-Month Project Budget (including data for Earned Value Analysis) 139
Table 36: Results Combinations for Earned Value Analysis 140
Table 37: Issues Log 143
Table 38: Indicator performance tracking table 144
Table 39: Sustainability plan checklist 157
Table 40: Modified Issues Log 163
Table 41: Example of Adapting Project Management Tools 185

Annex VII: Project DPro Brand Terms, Conditions, and Communication Guidelines

The Project Management for Development Professionals Guide (Project DPro Guide) and all other guides, methodologies, tools, and materials produced by PM4NGOs, like the Program DPro Guide and the Supplemental Materials, are shared and protected under the Creative Commons Attribution-NonCommercial 4.0 International License. All guides are also registered and identified by the International Standard Book Number (ISBN).

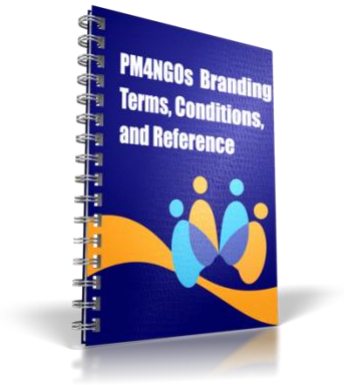
Practitioners, trainers, and all users are free to copy and redistribute the material in any medium or format, and adapt — remix, transform, and build upon the material, as long as you attribute PM4NGOs appropriate credit and do not use the materials for commercial purposes.

The Copyright and Creative Commons Attribution for the Project DPro Guide and all other PM4NGOs methodologies described above applies to all users, regardless of any formal or informal partnership with PM4NGOs.

In practice, how can Project DPro and PM4NGOs materials be used?

You can copy and redistribute the Project DPro Guide and other PM4NGOs methodologies in any format, in full version or remixed, transformed, and adapted, as long it is **not for commercial purpose**. In other words, you must offer PM4NGOs guides and materials or any material you develop that contains PM4NGOs guides and methodologies **free of costs**.

If you copy and redistribute the PM4NGOs guides and materials you **must give appropriate credit**, provide a link to the license, and indicate if changes were made. The use of PM4NGOs logo and our methodologies visual identification must follow the PM4NGOs branding guidelines.



In the PM4NGOs website we share a quick reference to use the PM4NGOs and our methodologies logos and names in your website or publication. You may do so in any reasonable manner, but not in any way that suggests that PM4NGOs endorses you , your organization, or the developed and shared materials.

Annex VIII: Reference List

Blackman, Rachel, 2003, Project cycle management, Teddington: Tearfund.

Boston University Corporate Education Center, Project Management Competency Development Process.

Britton, Bruce, Heaney, Deborah, Sterne, Rod, 2001, The Partnership Toolbox, London: WWF.

Council of Europe and European Commission, 2000, Project Management T-Kit, Strasbourg: Council of Europe publishing.

Dearden, Philip N., 2001, Program and Project Cycle management (PPCM): Lessons from DFID and other organizations, Tokyo: CIDT.

Deming, W. Edwards, 1986,. Out of the Crisis, Boston: MIT Center for Advanced Engineering Study.

Department for International Development (DFID), 2002, Tools for Development – version 15,

DFID, Impact Assessment & Project Management Cycle (PMC).

Emergency Capacity Building Project (ECB), 2007, Impact Measurement and Accountability in Emergencies The Good Enough Guide. London: Oxfam Publishing.

Erwin, James, Smith, Michael L., Role & Responsibility Charting (RACI).

European Commission, 2004, Aid Delivery Methods volume 1 Project Cycle Management Guidelines, Brussels: European Commission.

Foundation Terre des Hommes, 2001, Project Cycle Handbook, Le Mont-sur-Lausanne: Foundation Terre des Hommes.

Gardner, Alison, Greenblott, Kara, Joubert, Erika, 2005, What We Know About Exit Strategies Practical Guidance For Developing Exit Strategies in the Field, C-SAFE Regional Learning Spaces Initiative.

GB Equal Support Unit, A Project Cycle Management and Logical Framework Toolkit – A practical guide for Equal Development Partnerships, Herefordshire: Local Livelihoods Ltd.

Geyer, Yvette, 2005, Project Management, Pretoria: IDASA.

GTZ, Manual of Project Management for Development Practitioners.

International Fund for Agricultural Development (IFAD), Participatory Approaches for an Impact-Oriented Project Cycle

International Fund for Agricultural Development, 2002, A Guide for Project M&E, Rome: IFAD.

Levine, Carlisle J., 2007, Catholic Relief Services' (CRS) Guidance for Developing Logical and Results Frameworks, Baltimore: CRS.

Lipczinsky, Malte, 1996, Getting to Know PEMT, Berne: SDC, Evaluation Section.

McMillan, Della E., Willard Alice, 2006, Preparing for the Evaluation Guidelines and Tools for Pre-Evaluation Planning, Baltimore: CRS.

Mercy Corps, 2005, Design, Monitoring and Evaluation – Guidebook, Portland: Mercy Corps.

Novartis Foundation for Sustainable Development, Project Management Handbook, A Working Tool for Project Managers.

Pataki, George E., Dillon, James T., 2003, McCormack Michael, Project Management, Guidebook Release 2, New York: New York State Office for Technology.

Picard, Mary, 2001, Course Materials for the Design, Monitoring and Evaluation (DME) Course, Kosovo: CARE.

Plan International, 2002, Project Management Methodology

Project Management Institute. 2004. A Guide to the Project Management Body of Knowledge: PMBOK® Guide – Sixth Edition.

Rugh, J. 2002, Comparisons between Terminologies of Different Donor Agencies for Results/ Logical Frameworks, Atlanta: CARE International and InterAction's Evaluation Interest Group.

Saldanha, Cedric D., Whittle, John F., 1998, Using the Logical Framework for Sector Analysis and Project Design: A User's Guide, Manila: Asian Development Bank.

Siles R. 2004, Guidelines for Planning, Implementing and Managing a DME Project Information System. Atlanta: CARE.

Standish Group. 1995. The Chaos Report. Boston: The Standish Group.

Stetson, G. Sharrock, and S. Hahn, 2004, Propack The CRS Project Package: Project Design and Proposal Guidance for CRS Project and Program Managers. Baltimore: CRS.

Stetson, S. Hahn, D. Leege, D. Reynolds and G. Sharrock, 2007, Propack II The CRS Project Package: Project Management and Implementation Guidance for CRS Project and Program Managers. Baltimore: CRS.

The Centre for Development and Population Activities, 1994, Project Design for Program Managers, Washington, D.C.: The Centre for Development and Population Activities.

United Nations Environment Program, 2005, UNEP project manual: formulation, approval, monitoring and evaluation.

VCP, 2003, Facts for Projects (draft version).

Verzuh, Eric, 2008, The Fast Forward Project Management-Third Edition, New Jersey: John Wiley & Sons, Inc.

Wheelwright, S.C., Clark, K.B. 1995, LEADING Product Development: A Senior Manager's Guide to Creating and Shaping the Enterprise, New York: Free Press.

Wideman, Max, 2001, Project Management Simply Explained A Logical Framework to Help Your Understanding, Vancouver: AEW Services

World Bank, 2006, Managing the Implementation of Development Projects – New Edition.

World Vision Development Resource Team, 2007, Learning through Evaluation with Accountability and Planning: World Vision's Approach to Design, Monitoring and Evaluation (LEAP) – Second Edition, Washington, DC: World Vision International.

World Vision Development Resource Team, 2009, LEAP Lexicon – Second Edition, Washington, DC: World Vision International.

Youker, Robert, 1989, Managing the project cycle for time, cost and quality: lessons from World Bank experience, Butterworth & C. (Publishers) Ltd.