Project Logical Framework

WORKBOOK

FOR STRATEGIC PLANNING OF URBAN PROJECTS
This document has been written for the CITIIS (City Investments To Innovate, Integrate and Sustain) Program as a tool to enable the development of a Project Logical Framework (PLF).

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Logical Framework Approach (LFA), as the name suggests, is an approach to logically plan and monitor project interventions towards defined goals. This approach, rooted in the international development space, is most effective as a participatory process. It defines a systematic path to achieve a defined goal through project activities that are linked to outputs and outcomes.

This process, when used iteratively, has the potential to:
- Consistently enhance the alignment of the project interventions with the goals agreed on with the stakeholders.
- Raise awareness on the risks and assumptions in the project interventions.
- Facilitate the identification of ‘best-fit’ indicators for the measurement of project success.

In essence, these process outcomes drive projects towards success and ensure that the evidence being collected of success, is correct.

The final result of the exercise is a 4x4 matrix which is a compilation of all the elements identified in the process i.e. project activities, outputs, outcomes, long term vision, indicators, means of verification, risks and assumptions. This matrix of the project is the Project Logical Framework (PLF).

As part of CITIIS, a programmatic intervention to drive innovation, integration and sustainability in urban projects in India, a time period of 6-9 months has been introduced called the ‘Maturation Phase’. This phase is dedicated primarily to refining the project structure, and mainstreaming of the CITIIS values in these projects. This is done by capacity enhancement of human capital involved in driving the project and active stakeholder engagement with people influencing and benefitting from the project.

Embedding a tool like the Logical Framework Approach in this phase brings these objectives together by directly contributing to a vision-driven project structuring while keeping the CITIIS values of innovation and participation at the centre of the process. This workbook is a step-by-step guide that incorporates tools to identify individual elements and hence, develop the PLF matrix for CITIIS projects.

This workbook has been designed primarily as a capacity augmentation for Smart City SPVs supported by CITIIS program. However, the approach and the tools used for this workbook can be adopted in the planning and monitoring & evaluation process for any urban project.
HOW TO USE THE WORKBOOK

This workbook has been envisioned to make the process of creating our own Project Logical Framework (PLF) simpler. It visualises the process that makes thinking, discussions and collaboration as efficient as possible. The main objective here is to rationalise and deepen discussions and gradually improve the results.

The workbook has four primary tools that help characterise the problem, find the project vision, its stakeholders and the necessary activities to achieve that goal. These tools can be used sequentially to arrive at a PLF for your project.

The users are encouraged to engage with these tools in a free thinking space using flipcharts, post-its, coloured pens etc, to keep the design and planning phase flexible and iterative. The attached templates can be used to store the final mutually agreed elements, physically as well as digitally.

Each tool in the book follows the aspects of:

- **WHY?**: Purpose of the tool
- **WHAT?**: Central question being answered through the tool
- **HOW?**: Step-by-step process

The tools are further accompanied by an example of the expected output and an indicative template.
Logical Framework Approach is best understood as a path finder for travelling from point A; start point to point B; end point. Before we start our journey, we need to know the location we are at, and the location we want to get to. It is only when we have this information, can we assess transportation options and choose from the ones available to us. Once we have chosen an option, we would re-check if we are moving in the right direction by looking at the GPS or confirming with someone on the way. The choice of means to confirm our direction depends on where we are going and which path we have chosen.

In the context of urban projects, we need to make similar decisions and ask these questions while we design our project.

1. Where are we right now? – We need to be aware of the current situation and the main problems affecting our community. This is to inform us, the team involved in planning and designing of the project, of the reasons for doing the project.

2. Where do we want to go? – The final goal or the long term vision, mutually agreed to by the team, informs them of the direction in which they want the project activities to lead them. This vision indicates the progress of the community or space, after the underlying problem has been solved.

3. How do we get there? – There are multiple ways of transforming the current situation into the envisioned goal. This step is targeted at devising the solution pathways and evaluating multiple ways to choose the best-suited process for the context.

Once the solution is in place and we are already on the way to implement the solution agreed internally and with the stakeholders, we need to have similar checks and balances to ascertain that we are in the right direction. We may ask the question: How do we know we are moving in the right direction? – From time to time during the implementation, we need to verify whether our actions or activities are leading to the intended result and impact or not. We do so by pre-deciding what the measure of impact is, where the measurement can be extracted from and identifying various points in our project timeline when we should look at these measurements.

![Diagram](image-url)
The city of X has a number of bus operators and, over the last few years the rate of accidents has been significantly increasing. This has led to delays, inconvenience and a general sense of insecurity for passengers. There have been several fatal accidents as well, prevailing a general sense of insecurity among commuters.

The problem has been negatively backlashed leading to a decline in the number of daily passengers across bus operators. There are underlying technical issues owing to the fact that a number of these buses are old, lack maintenance and have been neglected for years. However, human error cannot be overlooked. Many of these accidents are also due to rash and high-speed driving on bad roads.
Where Are We Right Now?

Problem-Tree Analysis

We begin with analysing the current problem and the context of that problem. The objective is to have a common understanding of the inter-relationship between various problems and prioritize what we want to solve.

Why we are doing, what we are doing?

Step by Step Process

1. Identify the CORE PROBLEM that you intend to solve
2. What is causing the core problem? (CAUSES)
3. How does this problem manifest itself? (EFFECTS)

Case Example

Core problem: Increase in Road Accidents

CAUSES

- A1: Rash driving and Speeding
- B1: Under-maintained and old buses
- C1: Lack of incentive for Bus operators
- D1: Lack of incentive for Bus operators

EFFECTS

- P1: Reduction of road safety
- Q1: Drop in use of Public Transportation
- R1: Loss of income by bus operators
- S1: More wear and tear of buses
- P2: Increase in private vehicular traffic
- R2: Reduced business turnover
- Q2: Reduced business turnover

Where Are We Right Now?

Problem-Tree Analysis

We begin with analysing the current problem and the context of that problem. The objective is to have a common understanding of the inter-relationship between various problems and prioritize what we want to solve.

Why we are doing, what we are doing?
**Stakeholder Analysis**

The next step to further enrich our context is to identify the stakeholders associated with the problems that we are trying to address. These stakeholders could either be positively influencing, in which case they contribute towards the solution of the issue or they can be negatively influencing stakeholders, acting as roadblocks, thereby, hindering project progress.

**Who are we solving for and whom can we leverage?**

**Step by Step Process**

1. For each of the core problems, causes and effects, identify who are the people affected by it.
2. For each of the core problems, causes and effects, identify who are the people driving it.
3. For each of the core problems, causes and effects, identify who are the people who can influence it.
4. Now, for each group of people identified, add a (+) sign if they are part of the solution and add a (-) sign if they are part of the problem.

**Case Example**

**Core Problem: Increase in Road Accidents**

![Diagram showing the causes and effects of increased road accidents](image)
### Problem Tree and Stakeholder Analysis

#### CORE PROBLEM:

<table>
<thead>
<tr>
<th>P1</th>
<th>P2</th>
<th>P3</th>
<th>P4</th>
<th>P5</th>
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</table>

#### EFFECTS

<table>
<thead>
<tr>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
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#### CAUSES

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<tr>
<th>R1</th>
<th>R2</th>
<th>R3</th>
<th>R4</th>
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<tr>
<th>A4</th>
<th>B4</th>
<th>C4</th>
<th>D4</th>
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Legend:
- **Green**: Effect of the Problem
- **Blue**: Positively Influencing Stakeholders
- **Gray**: Cause of the Problem
- **Red**: Negatively Influencing Stakeholders
Where Do We Want To Go?
Envisioning

This next exercise asks us what the situation will look like when the problem has been solved. We start by stating our core belief and then work towards creating a long-term vision through iterations of the core belief. This vision will be a picture of the desired future, it is most often the positive alternatives of the difficulties and needs that the people face in their present daily life.

What would it look like when our problem is solved?

Step by Step Process

1. Highlight the keywords that define our problem.
2. Identify the main problem statement that needs to be solved for.
3. Frame the problem statement as a CORE BELIEF in the following format: WHAT? Because of/due to WHY? Is affecting/enabling WHOM? at/in WHEN? (4Ws)
4. Rewrite the CORE BELIEF by reframing it as a positive reaffirmation statement.
5. Iteratively write a more extreme version of the reaffirmed statement till we have an inspirational bold long-term vision.

Case Example

Long term vision: Efficient, sustainable and reliable transportation infrastructure enables all users of the city roads in barrier free transportation.
Long term vision:
How Do We Get There?

Results-Chain Analysis

The Results-Chain Analysis is an exercise that helps us graphically depict how change should come about, creating a logical sequence of outcomes, outputs and activities. Through this exercise we also assess our risks and assumptions. Thus, creating a result chain is primarily a matter of formulating a cause-effect hypotheses: IF we do this AND the assumptions are correct, THEN we will get that.

To develop the result chain, we build upon whatever we have done so far: problem tree, stakeholder analysis and envisioning.

What has to happen for us to achieve our vision?

Step by Step Process

1. Write our long-term vision on a post-it and stick it to the right-most end of our sheet.
2. Write on individual post-its, minimum 2, what has to happen for us to achieve our vision? These are primarily behavioural changes. These are our Outcome 1 and Outcome 2.
3. For each outcome, write on individual post-its, minimum 2, what has to happen for us to achieve our Outcome? These are our tangible results i.e. outputs corresponding to respective outcomes.
4. For each output, write on individual post-its, minimum 2, what has to happen for us to achieve our Output? These are our actual interventions i.e. activities corresponding to each output.
5. Now read the results chain, from left to right, for each link in the chain, Identify Risks and Assumptions
6. Read the results chain, from left to right
7. For each link in the chain, answer the following questions (These are our Assumptions):
   - Are we making an assumption for this link to establish?
   - What are we taking for granted for 1.1.1 to lead to 1.1 and so on?
8. For each link in the chain, answer the following questions (These are our Risks):
   - What is the risk for this link to establish?
   - What might prevent 1.1.1 to lead to 1.1 and so on
Case Example

**LONG TERM VISION**

Efficient, Sustainable and Reliable transportation infrastructure enables all users of the city roads in barrier free transportation

**OUTCOME 1**

Well maintained Public Transportation infrastructure

- A1: Connectivity is good enough
- A1.1: Allied road infrastructure is already in place
- A1.2: Skilled and reliable bus drivers ensure maintenance

- R1: Rash driving by bus driver continues

**OUTPUT 1.1**

Roads in good condition

- A1.1: Connectivity is good enough
- A1.2: Poor procurement practices
- A1.3: People in ground have proper operational capacity

- R1.1: Unpredictable weather and heavy vehicles

**OUTPUT 1.2**

Buses in good condition

- A1.1: Allied road infrastructure is already in place
- A1.2: Skilled and reliable bus drivers ensure maintenance

- R1: Rash driving by bus driver continues

**OUTPUT 2.1**

Supportive and accountable transportation institutional setup

- A2.1: Connectivity is good enough
- A2.2: Route rationalization will increase trust in public bus system

- R2.1: Lack of ownership in users

- R1.1: Lack of accountability and monitoring in construction process

**OUTPUT 2.2**

Reduced human dependency

- A2.1: Connectivity is good enough
- A2.2: Route rationalization will increase trust in public bus system

- R2.2: Unpredictable real estate development

**ACTIVITY 1.1.1**

Repair existing roads

**ACTIVITY 1.1.2**

Upgrade road construction practices

**ACTIVITY 1.2.1**

Procure new and good quality buses

**ACTIVITY 1.2.2**

Route rationalization

**ACTIVITY 2.1.1**

Good Operation and Maintenance standards

**ACTIVITY 2.1.2**

Uniform road safety standards

**ACTIVITY 2.2.1**

IT Enabled Systems

**ACTIVITY 2.2.2**

Reduce human dependency

**Behavioral Changes**

Actual Intervention - Tangible Results - Behavioral Changes
Actual Intervention

ACTIVITY 1.1.1

ACTIVITY 1.1.2

ACTIVITY 1.2.1

ACTIVITY 1.2.2

ACTIVITY 2.1.1

ACTIVITY 2.1.2

ACTIVITY 2.2.1

ACTIVITY 2.2.2

ACTIVITY 3.1.1

ACTIVITY 3.1.2

ACTIVITY 3.2.1

ACTIVITY 3.2.2

OUTPUT 1.1

OUTPUT 1.2

OUTPUT 2.1

OUTPUT 2.2

OUTPUT 3.1

OUTPUT 3.2

R = Risks; A = Assumptions

Tangible Results

R1.1:

R1.2:

A1.1:

A1.2:

R2.1:

R2.2:

A2.1:

A2.2:

R3.1:

R3.2:

A3.1:

A3.2:
Project Logical Framework (4*4 Matrix)

The Project Logical Framework matrix is a standardized compilation of all the elements identified in the process i.e. project activities, outputs, outcomes, long term vision, indicators, means of verification, risks and assumptions.

To transpose our results chain into PLF matrix, we start from the right most of the results chain and start filling in from the top of the grid. It means the long term vision from the right most goes on the top of the table followed by outcomes, outputs and activities. The corresponding risks and assumptions are filled in the last column of the matrix.

From a project planning point of view, each risk should have a risk mitigation strategy in our overall project plan and each assumption should guide the need for additional information or verification for your project.

As we proceed through the maturation of our projects, we will primarily engage with various components of our project design. We will conduct feasibility studies, run pilots and build prototypes, incorporate environmental and social safeguards measures, incorporate participatory voices in our projects. All of these will test the various linkages between activities to outputs and outputs to outcomes. We will identify additional risks and assumptions associated with our linkages. Our approach would remain to keep adding new elements and modifying existing elements to keep our PLF as a shared and dynamic pathway to project vision.
### Case Example

<table>
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<tr>
<th>Long Term Vision</th>
<th>Outcomes</th>
<th>Outputs</th>
<th>Activities</th>
<th>Project Chain Summary</th>
<th>Means of Verification</th>
<th>Indicators &amp; Targets</th>
<th>Risks and Assumptions</th>
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<tbody>
<tr>
<td>Efficient, Sustainable and reliable transportation infrastructure enables all users of the city roads in barrier free environment.</td>
<td>1. Well Maintained Public transportation infrastructure 2. Good public transportation systems</td>
<td>1.1: Roads in good condition 1.2: Buses in good condition 2.1: Supportive and accountable transportation institutional setup 2.2: Reduced human dependency</td>
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<td>R1: Rash driving by bus drivers continue A1: People will shift to public transport</td>
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<td>R1.1.1: Lack of accountability and monitoring in construction process. R1.1.2: Poor procurement practices. R1.2.2: Unpredictable real estate development. A1.1.1: Connectivity is good enough. A1.1.2: People on ground have proper operational capacity. A1.2.2: Route rationalization will increase trust in public bus system.</td>
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# Project Logical Framework

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ABOUT CITIIS

The CITIIS program has been conceptualised to assist Indian cities in implementing urban infrastructure projects that are integrated, innovation driven and sustainable. The 12 selected projects will improve sustainable mobility, increase the amount of public open spaces, implement technology to improve e-governance and drive social and organizational innovation in low income settlements.

The program combines financial assistance through loans and technical assistance through grants to the selected projects. This assistance focuses on strengthening institutions by committing resources to systematic planning (maturation phase) before implementation, by developing results-based monitoring frameworks and by adopting technology for program monitoring.

Technical assistance given to each project is a key component of this program. Fourteen mentors and experts from six countries and 11 cities bring with them a cumulative global experience of 273 years in urban infrastructure development. This pool works with the selected projects over a period of three years in all aspects of sustainable urban project delivery.

CITIIS is supported by the Ministry of Housing and Urban Affairs (MoHUA), Agence Française de Développement (AFD) and the European Union (EU) and is coordinated and managed by the Program Management Unit (PMU) at the National Institute of Urban Affairs (NIUA).