Project Cycle Management (PCM) Guidebook

Updated Version January 2019

This work has been prepared by EPTISA as per the Municipal Development Fund's (MDF's) Contract for the Second Regional and Municipal Infrastructure Development Project (SRMIDP)

LIST OF ABBREVIATIONS

CEGSTAR	Center for Effective Governance System and Territorial Arrangement Reform
CPA	Critical Path Analysis
GoG	Government of Georgia
EC	European Commission
FIR	Final Implementation Report
IR	Inception report
LFA	Logical Framework Analysis/Approach
LFM	Logical Framework Matrix
Logframe	Logical Framework
LSG	Local Self-Government
MDF	Municipal Development Fund
M & E	Monitoring and Evaluation
MRDI	Ministry of Regional Development and Infrastructure
OTJ	On the Job
OVI	Objectively Verifiable Indicators
Q&A	Questions & Answers
PCM	Project Cycle Management
PCN	Project Concept Note
PIP	Project Implementation Plan
PM	Project Management
PMBoK	Project Management Institute's Body of Knowledge
PPD	Project Proposal Document
PPP	Public Private Partnership
SAR	Subproject Assessment Report
SDC	Swiss Agency for Development and Cooperation
SRMIDP	Second Regional and Municipal Infrastructure Development Project
SSR	Subproject Summary Report
SWOT	Strengths Weaknesses Opportunities Threats
ToR	Terms of Reference
ToT	Training of Trainers
WB	World Bank
WBS	Work Breakdown Structure

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Executive Summary

Component 2 of the Second Regional and Municipal Infrastructure Development Project (SRMIDP) focuses on strengthening the institutional capacity of Georgian Local Self Governments (LSGs) with the aim of contributing to the establishment of an effective local self-government system.

In this context, the specific objective of the Project Cycle Management (PCM) project is to establish basic project cycle management (PCM) systems and procedures in the LSGs along with qualified staff that can operate the PCM systems.

Among the activities that will be carried out to achieve this goal is the training of the LSG staff in PCM techniques, as well as on-the-job training.

Other activities involve the development and deployment of specific tools that will support the LSG s in the applying the skills learned during the training and which constitute components of the PCM System that will be established in the LSGs over the course of the project.

Among these tools is the **PCM Guidebook**, the aim of which will be to serve as a reference guide on Project Cycle Management for the LSG staff, both during the training and during the on-the-job training phase.

The present Guidebook covers the main elements of the five PCM Phases, namely:

I. Project Situational Analysis;
II. Project Identification;
III. Project Formulation, Assessment and Approval;
IV. Project Implementation and Monitoring;
V. Project Evaluation;

The Guidebook provides a description of the principal tools that are used in the framework of the successive PCM phases, such as stakeholder needs analysis, problem tree and objective tree (Phase I), GANTT chart (Phase IV), and others.

Purpose of the Guidebook

The purpose of this Guidebook is to assist the Local Self Governments (LSG s) in Georgia to apply the Project Cycle Management approach in the preparation, implementation and management of their projects.

The manual outlines the main tools and methods used in Project Cycle Management (PCM) with specific focus on the infrastructure project management cycle. Although the emphasis

will be on infrastructure and related projects, the same methods and approaches can be applied for in the identification, design, and implementation of projects across all sectors.

This Guidebook aims to improve the understanding among LSG staff of the basic principles of Project Cycle Management by assisting them in using this approach in their daily project management tasks and in the development of high quality project documents for each phase of the project cycle.

The overall objective is to strengthen the capacity of LSG staff to identify, design and deliver high quality, results oriented projects.

The present version of the PCM Guidebook is to be considered as an Introductory version that will serve as basis for the training activities of the PCM project. The Guidebook will be updated in a continuous fashion after every training by including concrete feedback from the participants as well as documentation used during the trainings.

Introduction

What is a Project

A project is a series of activities that aim to achieve a clearly defined objective within a pre-defined time period and with a defined budget.

Projects differ in size, scope cost and time, but all have the following characteristics:

- ✓ A start and a finish;
- ✓ A life cycle involving a series of phases in between the beginning and end;
- ✓ A budget;
- ✓ A set of activities which are sequential, unique and non-repetitive;
- ✓ Use of resources which may require coordinating;
- ✓ Centralised responsibilities for management and implementation;
- ✓ Defined roles and relationships for participants in the project;
- ✓ Clearly identified stakeholders, including the primary target group and the final beneficiaries;
- ✓ A monitoring and evaluation system (to support performance management); AND
- ✓ An appropriate level of financial and economic analysis, which indicates that the project's benefits will exceed its costs.

PCM Guidelines, European Commission, March 2004

What is Project Cycle Management

Project Cycle Management (PCM) is a term used to describe the management activities and decision-making procedures used during the life time of a project.

It is a management approach that can be used to guide LSG s in the design, planning and implementation of projects. It can be qualified as set of tools linked to the process of identifying, initiating, planning, implementing, managing and evaluating projects or programmes.

PCM helps understanding and defining the tasks and functions to be performed during project implementation. It also guides management activities and the decision-making process during the course of a project. The process of planning and managing projects can be drawn as a cycle. Each phase of the project leads to the next.

Although there are a number of different versions of this cycle, they all contain five core phases:

The Five Core Phases of PCM

I. **Project Situational Analysis (Programming) Phase;**

II. Project Identification Phase;

III. Project Formulation, Assessment and Approval;

IV. Project Implementation and Monitoring Phase;

V. Project Evaluation Phase;

Some Definitions

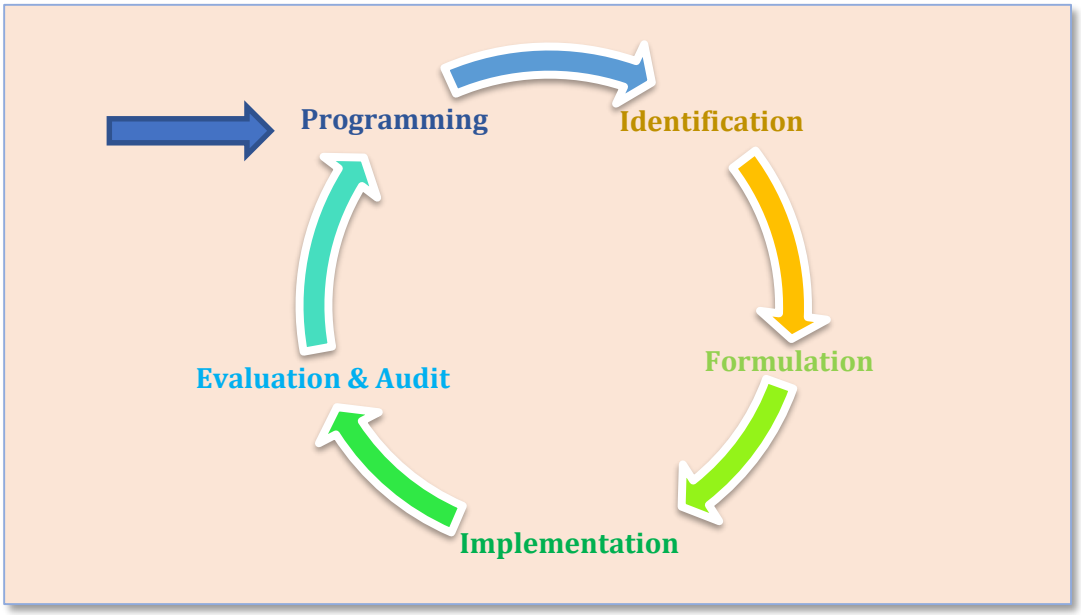
- ✓ **Inputs:** physical and non-physical resources that are necessary to carry out the planned **activities** and manage the project;
- ✓ **Outputs:** immediate products of an **activity**;
- ✓ **Results:** tangible products/services delivered as a consequence of implementing a set of **activities**;
- ✓ **Impact:** the effect of a project on its wider environment, and its contribution to the wider sector objectives summarized in the project's **overall objective**, and on the achievement of the overarching policy objectives.

A Glossary of PM Terms is given in Annex XI of the present PCM Guidebook.

Based on *PCM Guidelines, European Commission, March 2004*

The Five Phases of Project Cycle Management

Figure 1 PCM Cycle (*Source: PCM Guidelines, European Commission, March 2004*)



I. The SITUATIONAL ANALYSIS PHASE

Sets the context within which projects are identified, developed and implemented. This can be based on national or local strategies, sector specific plans, regional or local development plans. It consists in an analysis of the situation at national, local or sector level to identify problems and opportunities.

This phase includes a definition of the change that needs to take place in order to reach long term strategic goals and objectives.

- ✓ **Input to the Situational Analysis Phase**: The input to this phase can consist in National policies and strategies, regional and municipal policies, strategies and development plans, sector assessment studies, sector plans and strategies, policy and strategy evaluation papers, case studies and economic, financial, social, institutional and environmental analyses.

II. The IDENTIFICATION PHASE

To identify what a project will focus on, we need to find out **who should benefit and what their needs are**. A '**needs assessment'** will give an overview of community problems. A '**capacity assessment'** will help map out existing capacities to address the problems identified. The overall size and scope of the project implementation also needs to be clearly defined.

This phase therefore includes tools such as **stakeholder needs analysis** (who the stakeholders of the future project are, their needs and expectations), **problem analysis** (what the problems are that the project should address) and **objective analysis** (what objectives of the project would consist in). A preliminary **project identification sheet** should result from this process.

- ✓ **Input to the Identification Phase:** Input to this phase include national and local policy or strategy, result from sector study, framework established during programming phase, results of consultations with potential project stakeholders.

III. The FORMULATION & APPRAISAL & APPROVAL PHASE

The aim of this phase is to assert the **feasibility of the project ideas** outlined during the project identification phase. This may involve further research into the people affected by the problems that the project aims to address and how these problems affect them. This phase includes **filtration and assessment** (evaluation of the project idea against a specific set of criteria) as well as undertaking a **pre-feasibility study and/or a feasibility study.**

It equally involves the identification of possible risks to the project from external factors and how to address them. Based on this a **detailed project design** should be prepared (**Terms of Reference**) including management arrangements, the ways we will **measure project performance (through monitoring**) and **impact (through evaluation**), financing plan, cost-benefit analysis and funding proposal.

This phase also comprises the development of a so-called "**Logical Framework Matrix**" outlining the **overall objective** of the project, the project **purpose/outcome**, the project **results/outputs** and proposed project **activities**. To this is added the definition of **criteria/indicators** that will serve as a basis to monitor the project during its implementation and the **sources of information/verification** for these criteria.

- ✓ **Input to the Formulation and Appraisal Phase:** Project identification sheet, prioritization document, Pre-feasibility study, Feasibility Study, assessment score.

IV. IMPLEMENTATION INCLUDING MONITORING AND REPORTING

The purpose of this phase is to **deliver the results and contribute to the overall objective** of the project. It also involves the management of the resources available for the project as well as the **reporting** on project progress and the **monitoring** of project activities.

During the implementation of the project it is important to monitor and review the progress of the project and any outside changes that affect it. The project plans should be adjusted where necessary. The identification of key '**Milestones**' to check on project progress assists in the effective management of the project. Monitoring as such serves to measure the **efficiency** and **effectiveness** of the project and its activities.

- ✓ **Input to the Implementation and Monitoring Phase:** Terms of Reference and detailed design, tender documents and financing agreement, Logical Framework matrix including indicators and sources of information, activity and work programme, resource and budget allocation and schedules, risk management matrix, contractual documents, project implementation plan.

V. The EVALUATION & AUDIT PHASE

Evaluation should be carried out at or after project completion. Evaluation can be undertaken a few months or years after the project has finished in order to assess its long-term **impact** and **sustainability**. The evaluation can contribute to improving sector policies and strategies by providing recommendation in relation to a specific programme, policy or strategy.

The **audit** reviews how the funding was made and ensures that all payments were in accordance with the regulations related to the budget in line with the criteria of the funding agency. The role of the auditors is to evaluate how well the project management adhered to these rules and regulations.

It should be noted that…

- ✓ The **phases in the cycle are progressive** – each phase should be completed before the next phase can be tackled with success. New programming and project identification will build on the results of monitoring and evaluation, for example.

- ✓ Similarly, **phases cannot be ignored or left out**. A common mistake is to jump from initial *programming* to the *formulation* (of activities), missing out the *identification* phase. This phase is required to investigate the actual situation of stakeholders and determine which problems need to be resolved either by the project or by other parties outside the project in order for the intervention to be successful (i.e. to make real change and improvement of the situation possible).
- ✓ It is during the **identification phase** that the **relevance** of the planned activities is determined (relevance for the end users, the beneficiaries, but also relevance for the development priorities of the donor or project initiator).
- ✓ During the **formulation phase** it is important to develop a clear idea of the concrete **results** which must be achieved. The delivery of a set of concrete results forms the basis of the agreement between the donor/programme authority and the implementer (contractor).
- ✓ The **formulation phase** is also the moment during which the **risks** are determined and the plan to reduce those risks are integrated into the project plan. **Activities** are worked out (to form the basis of the budget estimate for the project) and **indicators of success** are determined. The format that is used for this plan in the PCM system is usually the **Logical Framework Matrix**[1]. This is the phase during which the **feasibility** of the project is assessed. In other words, is the plan logical, consistent and likely to succeed?
- ✓ During the **implementation phase** the project team will carry out the work. The people responsible for **programme** management **monitor** the progress at a distance, receiving information usually via reports and through visits after which they complete monitoring templates. They monitor both the progress of actual (physical) activity and the delivery of results, as well as the financial disbursement.
- ✓ In the **evaluation phase,** independent specialists are often employed to prepare a review of the activities and of the context in which the intervention took place, and to review the achievement of the project objectives and results. The evaluations take place after the end of the project and focus on the sustainability and impact of the projects.

Source: PCM Guidelines, European Commission, March 2004

This Guidebook is structured along the five main PCM phases:

Phase I: Project Situational Analysis

- Strategies, Sector Analysis, Development Plans (national, regional, municipal),
- Institutional and policy evaluation, environmental analysis;
- *Output*: Strategic Reports, criteria for appraisal of project based on strategy;

Phase II: Project Identification

- Stakeholder Analysis;
- Analyzing problems;
- Building the problem tree and checking it;
- Building the Objective tree
- Logical Framework Matrix
- Project Purpose
- Project Overall Objective
- Results of the project
- Activities and inputs;
- Defining indicators for project success;
- *Output*: Project Concept Note, Logical Framework Matrix;

Phase III: Project Formulation, Assessment & Approval

- Project Identification Sheet, Terms of Reference for detailed project design,
- Logical Framework Matrix;
- Assessment of resources needs;
- Analysing conditions for assumptions;
- Risk identification;
- *Output*: Pre-Feasibility Study, Feasibility Study, Project Fiche, Project Terms of References (ToR), ToR for Detail Design, Financing proposal, Procurement documents;

Phase IV: Project Implementation and Monitoring

- Tender documents, financing agreement, project budget, contract;
- Indicators and sources of verification, quality criteria and standards, logical framework matrix, Terms of Reference, project implementation plan;
- Monitoring, reporting;
- Monitoring design and templates;
- *Output*: Project progress reports, monitoring reports;

Phase V: Project Evaluation

- Analysis of various project papers: Project Terms of Reference, Project logical framework matrix, Project progress reports, monitoring reports;
- *Output*: Final Evaluation report;

The Infrastructure Project Cycle

Phase	Input	Process	Output
I. SITUATIONAL ANALYSIS	Strategic plans (National / Regional / Local) Policy papers Reports and consultancy papers	Strategy based analysis; Beneficiaries & stakeholders;	**Sectoral strategies and plans (i.e. Spatial Arrangement Plan);** Long term objectives and Visioning Criteria for project appraisal based on relevant strategy
II. IDENTIFICATION	Policy papers: **Strategies and Development Plans (National, Regional, Municipal, Sectoral and Overall**)	Problems to be addressed; Project Ownership; *Fundraising;*	**Stakeholder Needs Assessment** **Project Concept Note (PCN)/Project Proposal Document (PPD)/Project Fiche;** **Logical Framework Matrix**
III. FORMULATION & ASSESSMENT & APPROVAL	**Project Concept Note (PCN)** (ToR) Filtration/Evaluation against specific set of criteria; **Scoring of project proposals**	**Scoring systems and Filtration of project proposals** Assumptions; Risk Identification; Financing Proposal Decisions; Decision to fund; **Procurement for Detailed Design** **Goods procurement** **Services Procurement**	**Pre-Feasibility Study;** Cost-benefit analysis, Environmental assessment, Assessment Score; **Feasibility Study**; **Draft Financing/funding proposal;** (Logical Framework) **Detail Design;** **Investment Funding Agreement;** **Financing Agreement;** **Tender Documentation**;
IV. IMPLEMENTATION & MONITORING	**Tender Documentation;** **Terms of Reference for Procurement of services and goods** **Contracts with constructors/contractors**; **Logical Framework** **Project Plan (GANTT Chart)** **Project Budget** **Terms of Reference Construction**	Physical and non-physical means of constructing; Special conditions taken by other institutions/government; **Supervision**	**Progress and Monitoring Reports;** **Implementation and organization procedures and processes;** **Cost and financing plan**; **Payment orders**
V. EVALUATION	Various Project documentation, Terms of Reference, reports, monitoring reports, progress reports, budget etc.	Decision on using results in future identification and project planning;	**Evaluation Report**

Table 1 Infrastructure Project Cycle (*developed in cooperation with the MDF*)

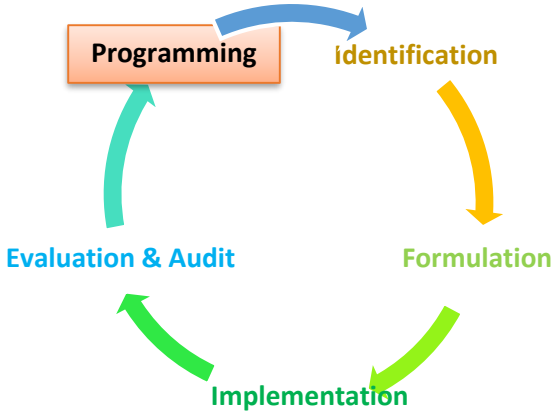
The Logical Framework Approach

The following table outlines the main stages in the project identification and planning process:

ANALYSIS PHASE	PLANNING PHASE
Stakeholder Needs Analysis is about identifying and characterising potential major stakeholders, assessing their capacity; **Problem Analysis** is about identifying key problems, constraints and opportunities, determining cause and effect links; **Objective Analysis** is about developing solutions form the identified problems, identifying means to an end relationships; **Strategy Analysis** is about identifying different strategies to achieve solutions, and selecting most appropriate strategy;	**Developing a Logical Framework Matrix** is about defining the project structure, testing its internal logic and risks, and formulating measurable indicators for success; **Activity scheduling/planning** is about determining the sequence and dependency of activities, estimating their duration and assigning responsibility; **Resource scheduling/planning** is about developing input schedules and budget from the activity schedule;

Table 2 Analysis Planning (*Source: PCM Guidelines, European Commission, March 2004*)

Chapter 1: Situational Analysis Phase



PHASE I. SITUATIONAL ANALYSIS

This phase sets the context within which projects are identified, developed and implemented. It can be based on national or local strategies, sector specific plans, regional or local development plans. It consists in an analysis of the situation at national, local or sector level to identify problems and opportunities.

This phase includes a **definition of the change that needs to take place in order to reach long term strategic goals and objectives.**

Project identification must take place in a **situational context**. This context is usually determined by the **policy or strategy of the responsible governing authority** and could be **National strategic plans, or Regional or Local strategies and development plans.**

This context ensures that current and future projects are consistent with these overall strategic objectives, and are compatible with each other and any additional projects being implemented in the same area or on behalf of the same beneficiaries and end-users.

Without this context, there is a danger that projects are inconsistent with each other, lack cohesion, waste limited financial resources, or fail to achieve the overall policy goals and objectives of the respective authorities.

By looking carefully at the entire situation which may have an impact on the activities and outcomes of the project it becomes possible to design a feasible project which can deliver all the expected outcomes on time and with the efficient use of resources and finances.

This analysis enables the project designers to **identify what external factors can have an impact on the project and ensures that the project is consistent with other initiatives and with the overarching policies or strategy of the Municipality.**

Input to the Situational Analysis Phase: The input to this phase can consist in National policies and strategies, regional and municipal policies, strategies and development plans, sector

assessment studies, sector plans and strategies, policy and strategy evaluation papers, case studies and economic, financial, social, institutional and environmental analyses.

Key Output of the Situational Analysis Phase: criteria for project appraisal based on the relevant strategies (national, regional, municipal).

There are a certain number of tools that can be used during the pre-identification stage of a project and that can help situate the project in the relevant context.

Strategic Tools	Description of Tools
1. Environmental Scanning	A matrix for strategically listing sources and scoring of information related to the context of a project by institutional level and type of document
2. SWOT	A four-pane window table that summarizes a project concept's external opportunities and threats and internal strengths and weaknesses

Table 3 List of Tools for Situational Analysis (*Source: Project Management Toolkit, South Eastern Europe Regional Infrastructure Program for Water and Transport, Booz, Allen, Hamilton, USAid, January 2003).*

1.1 SWOT Analysis

A SWOT analysis is a tool which is often used a part of the strategic analysis of a project. It helps understand the strengths, weaknesses, opportunities and threats involved in a project.

A SWOT Analysis stands for:

Strengths: Those parts of the sector that perform well and are likely to do so in the future as well;

Weaknesses: Those parts of the sector that do not perform well and are likely to continue to do so in the future;

Opportunities: Those parts of the sector that could perform well in the future with appropriate intervention;

Threats: Those parts of the sector which are or will become problematic;

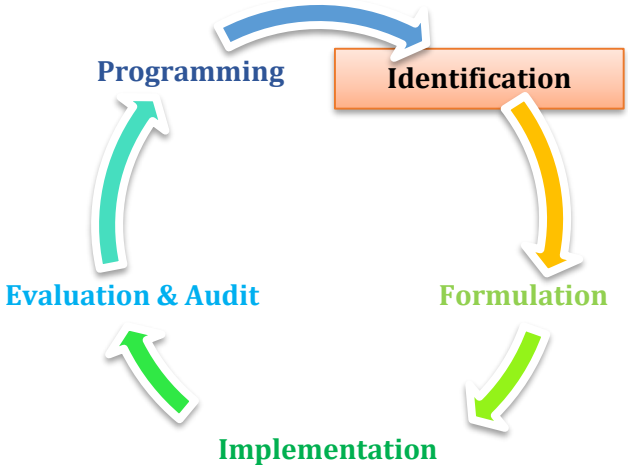
One starts with the project overall objective and thereafter move on to listing the **internal factors** that may affect the achievement of the overall objective (Strengths and Weaknesses), as well as the **external factors** (opportunities and threats).

SWOT Analysis matrix

Strengths	Weaknesses
Opportunities	Threats

See Annex 1 Situational Analysis Tools for more examples.

Chapter 2: Project Identification Phase



PHASE II. PROJECT IDENTIFICATION

To identify what a project will focus on, we need to find out **who should benefit and what their needs are**. A '**needs assessment**' will give an overview of community problems. A '**capacity assessment**' will help map out existing capacities to address the problems identified. The overall size and scope of the project implementation also needs to be clearly defined.

This phase therefore includes tools such as **Stakeholder Needs Analysis** (who the stakeholders of the future project are, their needs and expectations), **Problem Analysis** (what the problems are that the project should address) and **Objective Analysis** (what objectives of the project would consist in). A preliminary **Project Concept Note (Project Fiche or Project Proposal Document)** should result from this process.

Problem Identification: this step is the KEY stage in the entire project planning process. If this analysis is poorly done, or inadequate, the resulting project risks being incomplete or ineffective and the expected results are unlikely to be completely fulfilled.

In order to identify relevant problems it is necessary to clearly understand the scope and focus of the analysis. One therefore has to define the description and framework within which the identification will be done. It is important to determine whether the problems are *relevant* and thus should legitimately be considered. Problems also need to be relevant to the *parties* involved.

Here are some tips for **defining the scope of the problems identified:**

1. Determine the ***situation*** which is involved (e.g. geographical, demographical, sectoral etc.);
2. Determine the ***nature* of the problems** that the analysis will focus on (all problems, limited by sector, target group, etc.);
3. Decide for **which *stakeholder* these problems apply**;
4. Draft a **one sentence *statement* describing the situation;**
5. Check whether this definition will be **acceptable to the stakeholders** undertaking the problem identification;
6. Check whether this definition is **acceptable to the sponsors/donors of the project** (if applicable);

The organizing template for the Project Identification stage is **the Project Concept Note (PCN) or Project Proposal Document (PPD).** The template contains all necessary elements for a "fundable" or "bankable" project, i.e. a project that a bank or another financing institution would agree to consider for investment financing following a more detailed Feasibility Analysis and Appraisal. This document is often also referred to as Project Fiche or Project Identification Sheet. Examples of PPD or PCN are given in Annex 3 Project Identification Tools, of Annex I.

Some of the most important tools in the Project Identification Stage are described in detail below, but more examples on the tools are given in Annex 3 of Annex I.

Input to the Identification Phase: Input to this phase include national and local policy or strategy, result from sector study, framework established during situational analysis phase, results of consultations with potential project stakeholders.

Key Outputs of the Project Identification Phase:

- ✓ **Stakeholder Analysis**;
- ✓ **Problem Tree**;
- ✓ **Objective Tree**;
- ✓ **Logical Framework Matrix;**
- ✓ **Project Concept Note** (**or Project Proposal Document/Project Fiche**);

2.1 Stakeholder Needs Analysis

A Stakeholder Analysis is used to identify and evaluate the importance of individuals, groups, organisations and institutions that have or may have an influence on the success of the project, its activities and results. It is used as a tool to forecast the type of influence these groups or organisations may have on the project.

Different stakeholders may have differing perceptions of the problems to be addressed by the project. It is therefore useful to carry out an analysis of the parties involved including their respective influence, roles and interests.

There are different types of stakeholders:

- ***Stakeholders**: individuals or organisations that may affect (negatively or positively, directly or indirectly) or be affected by the proposed project intervention;*
- ***Beneficiaries**: those who will benefit from the proposed project intervention, directly or indirectly;*

To do this one can proceed with the development of a stakeholder matrix in order to map out, to the extent possible, each stakeholder's problems, interest, influence and possible role in the future project.

Example of Stakeholder Analysis based on Nikea Street Rehabilitation

Stakeholder	Their interests or needs	What the project expects from them (if anything)	Perceived attitudes and/or risks	Actions to take
List of the different Stakeholders affected by this specific project	*What EXPLICITLY are their interests, concerns, and/or needs*	*Will the project require the Stakeholder to engage with the project in some way, either directly or indirectly*	*Are there any concerns on the behaviour / attitude of the Stakeholder that may impact on the successful implementation of the project works*	*What should the project do and when, to mitigate these potential risks*
Business owners on street due for renovation	Improved access to their business premises; clear road access for customers and trade supplies; increased footfall	Cooperation with road construction contractor	Resistance to work; obstruction of workers	Information presented on benefit of new roadwork's to them and their customers at least one month in advance of commencement of works

Table 4 Stakeholder Analysis Example *(based on MDF Subproject Kutaisi Nikea Street Rehabilitation)*.

2.2 Problem Analysis

A problem analysis consists in defining and analysing one or more problems with the aim of deciding if and how to address them.

The assumption behind the problem analysis is that there is sufficient information to identify the causes for the problem and that it is possible to identify solutions to the problem. In other words, it is important to understand the situation in order to identify the problems, the causes of the problems and the consequences of the problems. Sources of information may include other project documentation, government reports, interviews with stakeholders, beneficiary group discussions etc.

Building the "Problem Tree"

Once the problems have been identified, it is necessary to formulate a hierarchy of these problems. This "cause-effect" relationship will form the basis of the development of future objectives, and ultimately the project design itself. All the problems identified will usually be able to fit into this tree.

The purpose of this stage is to be able to visualise the relationships between all the problems, and to connect them in a realistic relationship that indicates that "This problem ***causes*** This problem".

The "Problem Tree" indicates how all these problems are inter-related and each line on the tree shows the cause-effect relationship between the problems connected.

Example of simple "Problem Tree"

Nikea Street Rehabilitation SRMIDP Sub-project Kutaisi Municipality

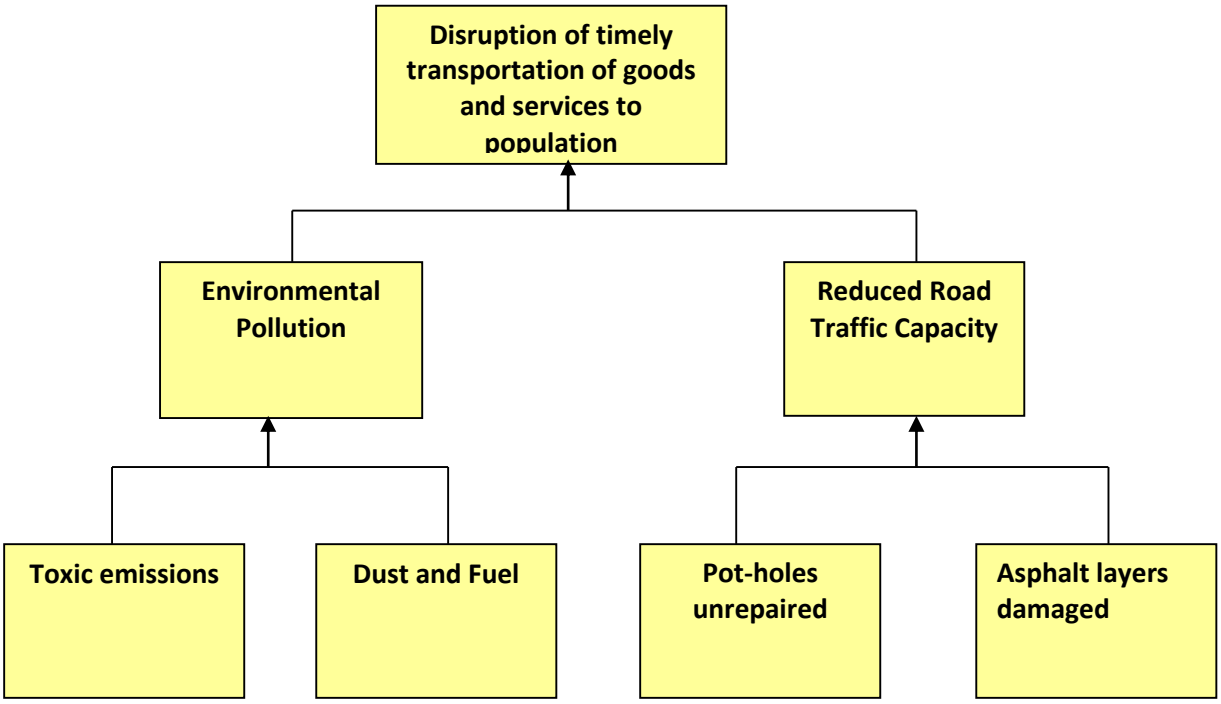


Figure 2 Problem Tree ***(based on MDF SRMIDP Subproject Kutaisi Nikea Street Rehabilitation).***

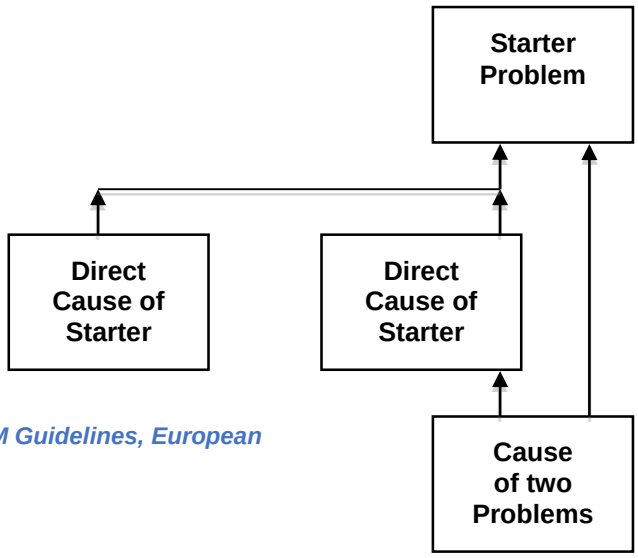


Figure 3 Starter Problem (*Source: PCM Guidelines, European Commission, March 2004*)

2.3 Objectives Analysis

Analysing the Objectives

The Objective Tree indicates all possible objectives that could be reached if all the problems in the entity were to be solved. In other words, the **problems are transformed into solutions.**

Which means that the **negative situations identified in the problem tree are transformed into positive situations**. Although not all the objectives listed here are likely to form part of a project it is essential for the further steps in the process that a complete objective tree is produced at this stage. The process itself is quite simple.

Example of simple "Objective Tree"

Nikea Street Rehabilitation SRMIDP Sub-project Kutaisi Municipality

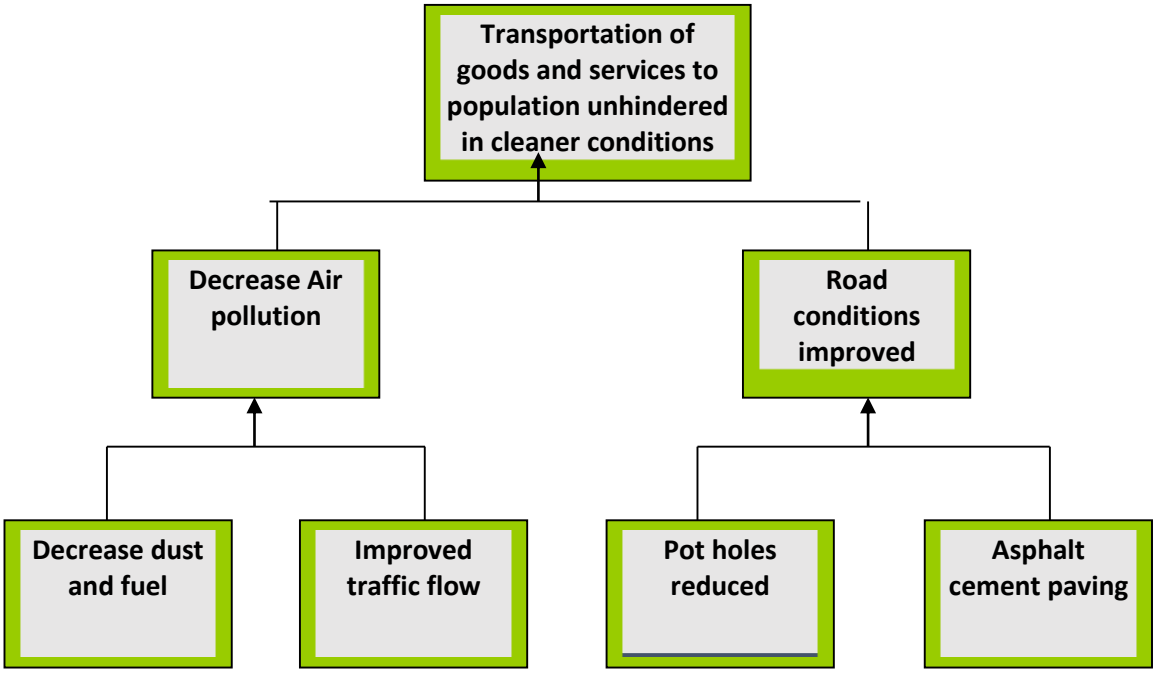


Figure 4 Objective Tree *(based on MDF SRMIDP Subproject Kutaisi Nikea Street Rehabilitation).*

2.4 Logical Framework Analysis

The **Logical Framework,** which is a project management tool, brings together the **key activities** of the proposed project intervention, together with a description of the anticipated **project outcome (purpose)**, **risks/assumptions**, and the **costs and means** necessary to accomplish the project purpose.

The **Logical Framework Approach (LFA) Matrix** is a key document especially if the funding request for a project is submitted from an external donor (for example in a largescale infrastructure project such as an extensive highway or large bridge). The LFA Matrix enables the project designers to ensure there is internal consistency in the design of the project, that **ALL activities have been identified**, and that external factors are taken into consideration.

It also highlights what should be **monitored** and **measured** to ensure that the project outcome is successful and gives the project management team **a quick reference point against which to monitor progress** of the project and to identify potential problems and difficulties. The phase is completed when the final **Logical Framework Matrix** is filled.

2.4.1 Logical Framework Analysis Principal terms

- **Project Purpose** Situation at the end of the project, the problem which the project aims to solve**.** The project is successful if it achieves the project purpose. Direct benefit to the project's target group(s).
- **Overall Objective** The project's contribution to policy, strategy or programme objectives (impact).
- **Outputs/Results** Tangible products or services delivered by the project. Strategies for achieving the Project Purpose. If one attains the results the project purpose will be achieved.
- **Activities/Inputs** Specific actions taken to deliver the Results/Outputs.
- **Important Assumptions and risks** Conditions important for project success, but that cannot be controlled by the project. This includes possible changes in the project environment which may affect the implementation of the project.
- **Objectively Verifiable Indicators** Standards for measuring project achievement;
- **Means of Verification/Sources of Information** indicate where information can be found on the situation described by the indicators.
- **Logical Framework Approach** A process involving problem analysis, objectives setting and strategy selection.
- **Logical Framework Matrix** The documented product at the end of the process (involving a detailed analysis of the objectives and the potential risks).

2.4.2 Completing the Logical Framework Matrix

The Logical Framework Matrix should provide a summary of project design and usually includes the project **Overall Objective**, **Purpose (Outcome)** and **Results (Outputs)**. It also lists

the indicative **Activities,** along with **Indicators**, **Sources of Information (Verification)** and **Assumptions**.

From all the possible project interventions, the project designers have to choose one objective to be the ***Project Purpose***. The project design that follows has to "deliver" this objective at the end of the project life. The project will also ***contribute*** to other objectives (the ***Overall Objectives***). During its life time the project will deliver specific ***Results*** following the successful completion of project ***Activities.*** These elements are presented in the form of a **Matrix**, commonly referred to as the **Logical Framework Matrix**.

A simple illustration of a **Logical Framework Matrix with different types of indicators, sources of information, assumptions and risks** is given below.

Logical Framework Matrix - Basic Elements

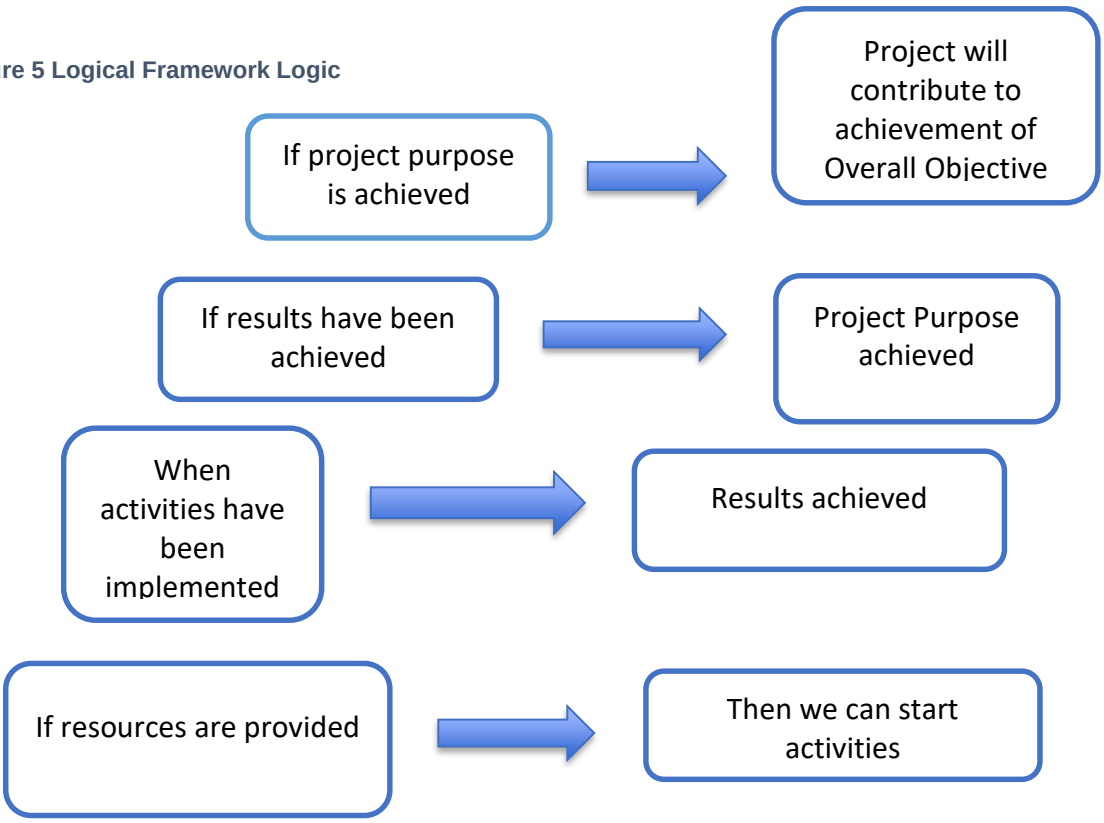
	Description	Indicators	Sources of Information	Assumptions and Risks
Overall Objective	Broad development impact at sectoral or national level;	**IMPACT INDICATOR**: Overall impact on the national/sectoral level, consequences beyond target groups;	How will information be collected, when and by whom?	
Purpose	Development outcome at end of programming/project cycle – specific benefit to target group/beneficiaries	**RESULT INDICATOR**: Direct effect of project on the target group/beneficiaries;	Same as above	If the purpose is achieved what assumptions must apply to achieve the Overall Objective?
Results/ Outcomes	Tangible results, goods and or services, delivered;	**OUTPUT INDICATOR**: relates to activities, i.e. result of activities carried out;	Same as above	If the results are achieved what assumptions must apply in order to achieve the Purpose?
Activities	Tasks which need to be carried out to deliver planned results;			If Activities are completed, then which assumptions must apply in order to deliver results?

Table 5 Logical Framework Matrix Main Elements (*Source: Training material PCM project expert)*

At the end of the project you can also check whether the **project purpose** has contributed to the **overall objective**, although it is probably easier to do this in the framework of an **ex-post evaluation** which usually takes place sometime after the completion of the project.

Here is another illustration of this process:

Figure 5 Logical Framework Logic



Step by Step Sequence of Completing the Logical Framework

1. Overall Objectives
2. Specific Objectives of the Project Purpose
3. Results (to be obtained)
4. Activities
5. Pre-conditions necessary to commence Activities
6. Assumptions at Activity level
7. Assumptions at Results level
8. Assumptions at Project Purpose level
9. Assumptions at Overall Objectives level
10. Indicators at Overall Objectives level
11. Source of verification at Overall Objectives level
12. Indicators at Project Purpose level
13. Source of verification at Project Purpose level
14. Indicators at Result level
15. Source of verification at Result level
16. Means at Activity level
17. Costs at Activity level

		Indicators	Source of verification	External Assumptions
Overall Objectives	1	10	11	9
Project Purpose	2	12	13	8
Results	3	14	15	7
Activities	4	16. **Means**	17. **Costs**	6
				5. **Pre-conditions**

Table 6 Logical Framework Matrix Step by Step (*Source: PCM Guidelines, European Commission, March 2004*)

The Project Purpose

The project purpose is the objective that the project is designed to deliver during its lifetime. The Project Purpose will be chosen from the objective tree.

Determining the Overall Objectives

The Overall Objectives are those objectives outside of the project's responsibilities and control but to which the project will **contribute**. They are chosen from the objective tree.

PROJECT PLANNING MATRIX			
Summary	**Objectively Verifiable Indicators**	**Sources of Verification**	**Assumptions**
Overall Objective			
Project Purpose (Outcome)			
Results (Outputs)			
Activities			

Table 7 Project Planning Matrix

Determining the Results of the project

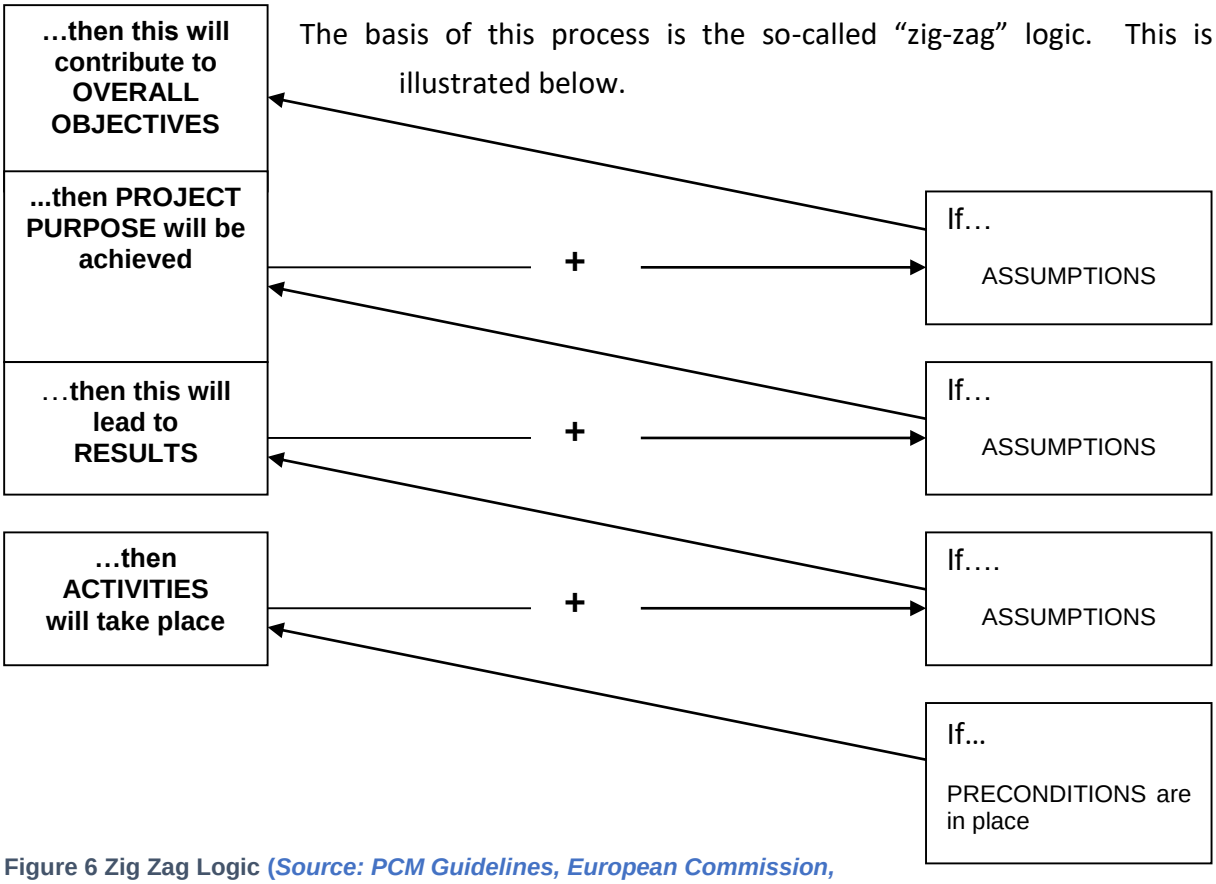
The Results of the project will be achieved within the project responsibilities, resources, and timeframe. They are the **direct subjects of project management monitoring**. **The Results are chosen first of all from the objective tree** (those objectives immediately below the level of Project Purpose). The project purpose is reached when the results have been achieved.

Determining Activities and Inputs

The placing of ***Activities*** in the Logical Framework is the next step, and it is worth considering also identifying responsibilities, resources, people, funding, etc.

2.4.3 Assumptions and Risks

The **project planning document** must contain all the relevant information and factors to achieve the objectives of the project. To ensure that the plan is comprehensive, all conditions necessary for achieving the Project Purpose must be added. The **Assumptions are the conditions that are necessary for the success of the project but which are outside the control of the project itself.**



The basis of this process is the so-called "zig-zag" logic. This is illustrated below.

Figure 6 Zig Zag Logic (*Source: PCM Guidelines, European Commission, March 2004*)

Assumptions are those factors that the project cannot directly influence or achieve, otherwise they would be Activities. They are therefore outside of the direct control of the project team and therefore also constitute a risk to the project at each level.

Of course, the **factors outside the project influence form a risk to the project success.** *Many projects succeed in implementing the activities as outlined in the Logical Framework but still fail to make the expected impact due to factors outside of their control and influence.*

Assumptions are included in the plan, so they can be monitored, and so project activities must include the monitoring of these external factors.

2.4.4 Indicators

The indicators in a Logical Framework are used to provide clear and unambiguous monitoring tools to measure the results of activities carried out in the framework of the project. These indicators must be **objectively verifiable**.

The indicators are criteria that are defined in advance that will allow to follow up and check on project progress.

The indicators should be defined before the project starts, and their purpose is to **monitor or evaluate whether a project does what it said it would do**.

They provide the evidence that something has happened, whether an output/result has been implemented, an immediate effect occurred, or a long-term change observed (Impact Indicator).

For the Project Purpose, the quantity and quality should be defined, plus the time horizon, location, and target groups. For the Results, quantification and qualification will normally be sufficient. The indicators should be **measurable**.

2.4.5 Quantitative vs Qualitative Indicators

Indicators can be classified as follows:

- **Quantitative Indicators**
- **Qualitative Indicators**

A. Quantitative Indicators

Indicators which tell us whether the activities and actions we have planned are actually happening as intended are known as **Output/Result Indicators/Outcome Indicators**. These types of indicators will help to monitor whether you are doing what you planned (outputs/results/outcome) but do not give us an idea of the effect/impact that is brought about by these outputs/results.

Quantitative indicators can be defined as measure of **quantity, such as the number of people who own sewing machines in a village.**

B. Qualitative Indicators

Qualitative indicators are usually indicators of change (**impact**). Answering these types of questions give us information that indicates whether the project is leading to the changes in people's lives.

Qualitative indicators can be defined as **people's judgements and perceptions about a subject, such as the confidence those people have in sewing machines as instruments of financial independence.** Qualitative indicators are non-numerical factors for determining **level of progress towards a specific goal.** Qualitative data is based on opinions or viewpoints rather than hard facts or numbers.

Intermediate Results/Output (Quantitative) Indicators for the "PCM Project" (Component 2 of the SRMIDP) measuring Output/Result.	
Indicator	***Unit of Measure***
Percentage of LSG s with established PCM Systems and Procedures	Percentage
Percentage of LSG s with staff that can operated PCM Systems	Percentage

Outcome (Quantitative) Indicators for the "PCM Project" (Component 2 of the SRMIDP) measuring Outcome (project Purpose).	
Indicator	***Unit of Measure***
Percentage of LSG s with established PCM Systems and Procedures	Percentage
Percentage of LSG s with staff that can operate PCM Systems	Percentage

Outcome/Performance (Qualitative) Indicator of the "PCM Project" (Component 2 of the SRMIDP) measuring Impact (Overall Objective)	
Citizen satisfaction with services delivered by LSG to the population	Citizens' viewpoint

Table 8 PCM Project Indicators

2.5 Project Concept Note (PCN)

The main purpose of the Project Concept Note (PCN) is to present in a clear format an outline project proposal that can be considered for formal approval. Once general approval is given a more detailed project proposal including Terms of References (ToR) can be prepared. General content required for sections of the Concept Note is the following:

Administrative details	*The Title of the Project and the usual contact details for the project in the municipality.*
The outline of the project rationale	*This section presents the information relating to the issues that are present in the location and to which the project will address the intervention. It should present clearly how the specific project intervention will meet these problems and what alternative 'solutions' were considered and set aside in favour of the specific project intervention proposed.*
Identifying the main user needs that should be addressed	*This section presents the needs that have been identified and that will be addressed by the project. It should be based on a sound Stakeholder/Needs analysis and present relevant information about the scope and focus of the project and the demands that the project will address.*
The project Scope	*This section describes the project intervention in outline, presenting sufficient information to identify the key stages in the*

	project implementation and how these will contribute to the desired outcomes.
Implementation costs	*This section presents in tabular format the financial costs of the project for a seven-year period and a comparison with the alternative possible project interventions. (If the project will be longer than seven years the residual costs as presented as a single lump sum.). It is critical that ALL relevant costs are included in this section, including any environmental mitigation measures that are required.*
Project benefits	*The information required in these sections relate to the benefits the intervention will have on the stakeholder groups previously identified and, if applicable, any differences in the alternative proposals previously considered. Estimates of the various capital costs should be included as well.* *Finally, this section should indicate why this is an appropriate use of public funds in comparison to the rejected alternatives.*
Affordability	*The final section presents the budget implications of the project on the municipality and details on ownership, and future maintenance (as appropriate) together with socio-economic impacts, environmental costs (as applicable) and any further studies which may be appropriate prior to final approval, such as a feasibility study.*

Table 9 Project Concept Note (PCN) Main Sections (*MDF Template*)

See Annex 2 "Project Identification Tools" for live examples of Project Concept Notes (PCN).

2.6 Project Case Studies from the Municipalities

2.6.1 Gori Municipality

Case Study: Gori Bridge

Worked Example: Using Stakeholder analysis to identify Project Problems and medium-term Impact for a new Bridge Project in Gori

Gori is located in eastern Georgia in the region of Shida Kartli and has a current population of approximately 50,000 (2015) down from a high of 69,000 in 1989 although it has started to increase again in recent years. The city economy is derived from a variety of sectors, but relies on agriculture, tourism, and SME and service sector for its main employment. Many residents commute to the capital, Tbilisi, which lies approximately 90 km to the west, a journey of about 45 minutes.

It is well known as the birthplace of Joseph Stalin, but also boasts as the birthplace of the philosopher, Merab Mamardashvili and a number of other historic figures. It also has many other historical connections and sites, including a castle built in the 17th century and the 18th century church of Gorijvari and the rock-hewn town of Uplistsikhe and the even older 7th century Ateni Sioni church which are close by and within easy travel distance for tourists.

At the level of the entire municipality (including the city of Gori) local economic activity is based around agriculture (production of fruit, vegetables, cereals, animal husbandry). Other important sectors of economy are general trade, transportation, construction and tourism. After meetings with the representatives of Gori Municipality there is a desire to improve the potential for tourism as well as to open up the entire conurbation to residential and commercial growth.

There is a general development plan for the region of Shida Kartli for 2014-2021 which was approved by the Government of Georgia on 17 September 2013. This may be regarded as a general or overall strategic development plan, although it is of a broad character and does not envisage the creation of specific development strategies for the city of Gori or other municipalities as separate territorial entities.

Nevertheless, it is incumbent on the Municipal administration to identify and proceed with some form of overall development for the city in respect of economic, social, health, and educational requirements. This project falls under their general remit.

The project refers to the construction of a new bridge over the River Liakhvi**,** connecting both parts of the city by a second bridge to the Northern end of the Western bank, which is an under-developed area of the city. (See map below). The only other bridge was originally built in the last century and was damaged during the conflict in 2008. It serves as the only means

of traversing the river to access the residential and commercial properties on the Western bank.

Traffic intensity in Gori was high due to the direct connection with Tbilisi, although in recent years the new highway has reduced the traffic in Gori somewhat. However, major traffic flows gather at the central streets, and are most intensive at rush-hours. The necessity for all traffic heading to the Western conurbations means there is additional pressure on the bridge, and increased traffic, and the related pollution that accompanies this.

The Location

The area of the land and river section where the new bridge is intended to be located is in a state of disuse, and due to the limited access by road, the land has been used as a dumping ground for rubbish and refuse and is in need of significant renovation.

View looking over the River towards the Western bank

The residential housing blocks on the Western bank are in a state of some disrepair, and this is one of the key aspirations for the municipality to encourage both public and private investment to improve the housing situation as an impetus to profiling Gori as an attractive city for incoming population.

In addition, there is an expectation that the improved access to the rest of the city would serve as an incentive for other types of investment, which would include the renovation of factory or production facilities to service the city and close hinterland.

Picture of old factories/plants

The likely position of the new bridge from the Eastern shore of Gori city.

The proposal for the new bridge has been a topic for development by the municipality for a number of years. The slow increase in population and the depressed economy have proved to be a catalyst for taking the idea to the next stage of analysis and assess how and to what extent the bridge can facilitate social and economic development.

In order to ensure that all the related issues for which the bridge would be an appropriate solution were understood, a short Stakeholder analysis was undertaken. The results of this analysis are tabulated below the map on the following page.

Old Bridge

Stakeholder Matrix

Stakeholder	Problems
Business sector	Reduced numbers of customers Delays in getting product delivered Regular traffic jams in city centre Business opportunities reduced Farmers have trouble getting produce to markets
Tourists	Insufficient accommodation Few alternative touristic activities
City population	Population levels high Difficulty in accessing Western areas Problems in accessing city centre from the West bank Slow moving traffic Length of time to access different parts of city
Ministry of Environment	High levels of pollution due to traffic emissions
Ministry of Economy	Low levels of economic activity
Municipality of Gori	Tourism potential restricted Western bank underdeveloped

Once the potential issues had been identified they were reviewed to see how these different issues were inter-related, and a form of graphic, or "tree" was elaborated which showed the connections. These connections are illustrated below. The exercise is useful in determining the scope of the Impact a successful project should deliver and to see whether there are factors that need to be additionally implemented which will be outside of the project control.

The additional benefit is in identifying the added value the project provides, and to make a preliminary assessment of what will be the changes envisaged by the project and whom will be responsible for sustaining these after project closure and hand-over has taken place.

Simplified Problem Tree

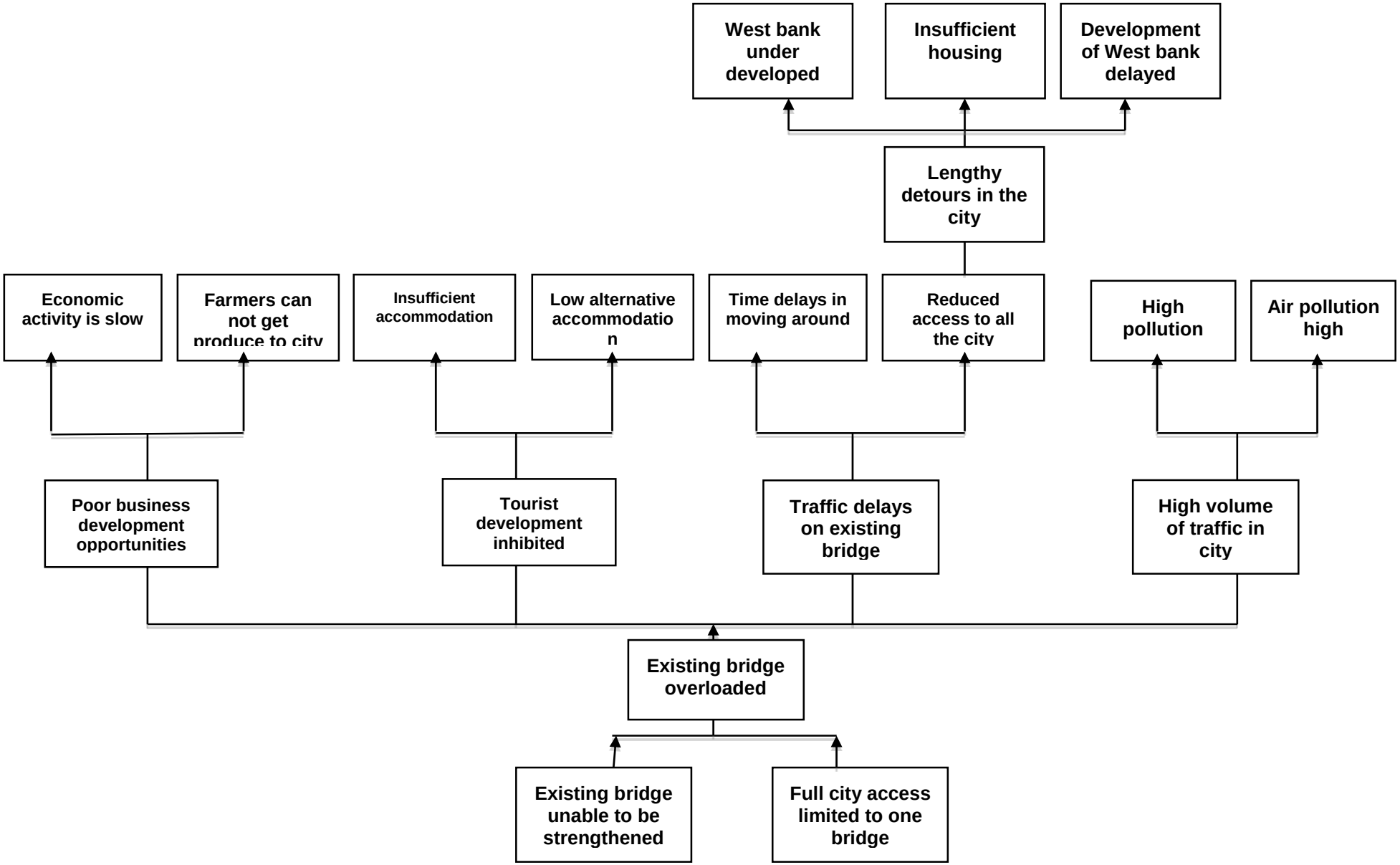
Once the potential issues had been identified they were reviewed to see how these different issues were inter-related, and a form of graphic, or “tree” was elaborated which showed the connections. These connections are presented on the following page.

The exercise is useful in determining the scope of the Impact a successful project should deliver and to see whether there are factors that need to be additionally implemented which will be outside of the project control.

The additional benefit is in identifying the added value the project provides, and to make a preliminary assessment of what will be the changes envisaged by the project and whom will be responsible for sustaining these after project closure and hand-over has taken place.

Following this analysis, there appears to be a range of reasons for why such an investment would prove to be an advantage to the city if both the bridge itself and the recreation garden/park can be constructed.

The next phase of this project development should be a Feasibility study to identify all the issues surrounding this project. The analysis to date should provide the basis for the Terms of Reference for the Feasibility study and ensure that the municipality will have the necessary information on which to proceed with the project and seek potential funding arrangements.


West bank under developed
Insufficient housing
Development of West bank delayed
Lengthy detours in the city
Economic activity is slow
Farmers can not get produce to city
Insufficient accommodation
Low alternative accommodation
Time delays in moving around
Reduced access to all the city
High pollution
Air pollution high
Poor business development opportunities
Tourist development inhibited
Traffic delays on existing bridge
High volume of traffic in city
Existing bridge overloaded
Existing bridge unable to be strengthened
Full city access limited to one bridge

Conclusions

The purpose of undertaking this approach is to ensure that as the project concept is being developed, the designers are fully aware of ALL the potential issues and problems that will be addressed by the project once it begins its implementation and enables the drafting team to identify what the Terms of Reference should contain.

In this example, the next stage will be the drafting of the Terms of Reference for a Feasibility Study to finalise the development of the project design and to ensure that options for the bridge and the park are fully considered. Confirmation of the rationale and the identification of potential stumbling blocks or difficulties would also be a requirement of the ToR deliverables.

Next Steps:

1. Support drafting of Terms of Reference
2. Publication of tender (Municipality)
3. Support evaluation of tender offers

Socio-Economic Development
Part 2

Gori Programme Part 2: "Packaging & Scheduling Project ideas"

During the development of any project, external factors can occur that may have an impact on the Activities, or Outcomes of the project being developed. In such a case it is important that the project designers are aware of changing circumstances and adapt their own project design to address and take account of the new evolving situation.

Such an occasion can occur at any time and influences how a project responds through either a new design, a packaging of smaller projects into a larger more effective one, or through a revision to the project scheduling.

The situation in Gori has continued to evolve and such a situation required the project team to revisit the existing project and see how the new situation can impact on the current identification and formulation phase of the PCM cycle.

Packaging Project

The idea of 'packaging' projects is a feature of the PCM process, and in particular following the identification of potential Objectives in the form of an objective "tree", which is a diagram presenting the "means/ends" relationship of the many objectives identified following the situational analysis.

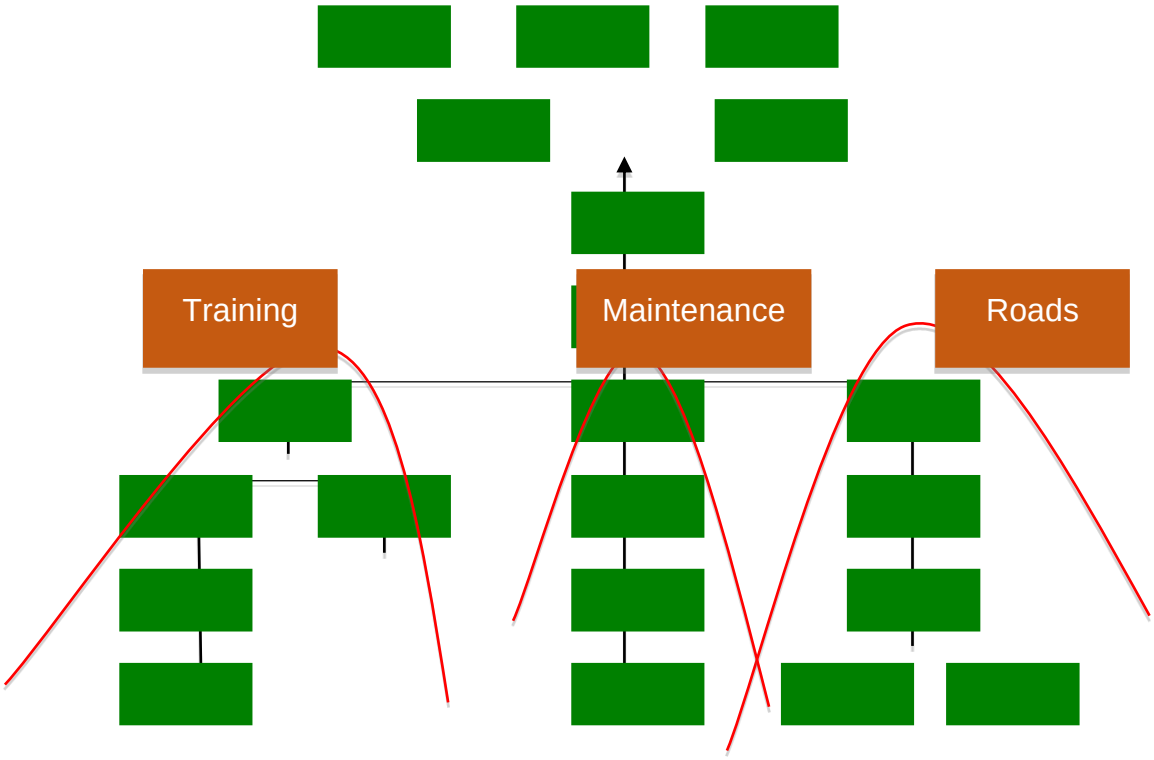
This is referred to as the "scoping" stage in project identification. And represents the assessment of what is a practical and realistic possible project from among the many potential ones identified.

In the case of Gori, the identification of potential developments presented a number of small projects, which naturally fit together into a larger one with more impact and for which donor support was sought. (It is a recurring possibility that donors may find a larger project with greater potential impact more attractive, despite the additional financial requirements).

As an example of the idea of scoping, the "Objective Tree" presented below is for illustration purposes only. Each "box" represents a potential project objective (its exact nature being dependant on which Objective will become the Outcome, for the selected project. Any one of the grouped objectives *could* be a project in its own right, but the higher up the "tree" the project is selected, the greater the impact, but the much larger the commitment in time, people, resources and corresponding budget.

Similarly, should a project be chosen nearer the bottom of the tree, the maximum impact of the project will only come about if a number of ADDITIONAL projects are implemented by someone else, or at a future time.

[*It should be noted that the "titles" of each of the scoped objective branches is for convenience and not prescriptive.]*



For Gori, the principle project refers to the construction of a new bridge over the River Liakhvi, connecting both parts of the city by a second bridge to the Northern end of the Western bank, which is an under-developed area of the city.

The only other bridge was originally built in the last century and was damaged during the conflict in 2008. It serves as the only means of traversing the river to access the residential and commercial properties on the Western bank.

However, in addition there is the possibility of developing a Park/Garden area on the Eastern side of the river where the bridge crossing will be developed, and this secondary project should be considered within the overall project concept.

Site of possible Park and Bridge

While this will inevitably increase the time and budgetary considerations, the Impact of combining these two disparate but related project concepts should be greatly enhanced.

In this example, the next stage was the drafting of the Terms of Reference for a Feasibility Study to finalise the development of the project design and to ensure that options for the bridge and the park are fully considered.

Confirmation of the rationale and the identification of potential stumbling blocks or difficulties would also be a requirement of the ToR deliverables.

Draft Terms of Reference (ToR)

Following discussions with the team in Gori, an outline of a ToR for the preparation of an Environmental Impact Assessment and eventual project design was prepared.

The Infrastructure team in the municipality would have to complete the detailed content with the support of the PCM Project Team, ensuring that the key points in the ToR template are addressed.

Title of Project	**Gori "New Bridge" and recreational Park**
Background	*Reference to the National legislation requiring the EIA* Present the rational for the project and the EIA Short description of the project [*attach the LogFrame*] and describe the key information, including objectives, location, duration, life-cycle of the project The following technically feasible alternatives have been identified: *Provide technical alternatives to the project implementation as appropriate* Existing information on the project and environment can be found: *here include any appropriate references to studies, or other documents of relevance to the proposed EIA*

Objective	The Environmental Impact Assessment will provide the Municipality and other project partners with sufficient information to justify, on environmental grounds, the acceptance, rejection, or modification of the project for implementation.
Results	Here it is necessary to state clearly what the contractors are expected to deliver to the Municipality at the conclusion of their EIA. As a minimum it should address the following key deliverables: o *An overview of the project within the context of any appropriate and relevant legislation* o *Proposed project alternatives* o *Descriptions of key Stakeholders and their respective issues and/or concerns about the planed project* o *A description of the key Environmental issues pertaining to the project and its anticipated Activities* o *A description of the location of the proposed bridge and park area including any factors which might impact on the feasibility of the project delivery* o *Recommendations on specific impacts identified and the EIA methodology proposed to be used* o *Estimates of time-frame and anticipated costs and resources necessary to complete the EIA*
Deliverables	Here the Municipality has to be clear about the final deliverables expected. For example: o *Indentify and assess the potential environmental impacts of the proposed project and alternatives* o *Recommendations for the implementation of solutions to any environmental issues identified* o *Proposals for the (re)design of the project Activities* o *Proposals for managing any additionally identified risks* o *Proposals for overcoming and identified constraints on the proposed project Activities*
References	Include the outline / draft LogFrame Reference to any additional materials or studies relevant to the proposed project proposal

Scheduling Projects

Scheduling of projects refers to the need to understand the interrelationships of projects, and in particular to see how the "Outputs" and "Outcomes" of one project can have an input or impact on a different project. Such a scheduling programme is sometimes referred to as a Project "Pipeline" and in essence requires the project team to produce a more long term programme of projects in which the inter-dependencies can be more easily identified.

This is now an issue for Gori as a new development has arisen that impacts on this project design. The municipality has secured funding for a variety of tourist developments in the city and immediate environs. This includes a cycle track around the city, which could be extended, to this new project idea in a second phase. It now become important to identify the programming of these closely related projects to ensure that there are no conflicting issues.

The scope of the current projects relate to the construction of a new Tourist information centre.

A cultural centre for presentation of historical handiworks and trades,

The renovation of the cultural museum,

And a 5 km cycle route from the city centre and connecting the various tourist points of interest. This project would also include capacity building on SMEs in tourist services and goods and revising the University curricula in tourist studies.

Project Scheduling can also can highlight if there are potential “blockages” or “bottle-necks” in any one of the key factors in a project development; the People, the Material Resources; the Timings; or the Financing.

Typically, some form of Gannt chart or time planner is used to identify these different components in an overall programme of development, and an illustration of one is presented below.

The importance is to identify where there are heavy demands on one of the key resources and to either adapt the time-planning, or to find alternative ways to supplement existing expertise with the pressure identified.

For the majority of projects under the control of the municipality the scheduling will be a consideration during the design phase and importantly to ensure that there is sufficient monitoring of the implementation of projects once they commence, and the impact on other projects can be considerable and potentially debilitating if delays of problems arise in a project that has impact on others.

Next Steps: PCM Project Team

1. Support development of ToR for EIA for Park (Quarter 3 /2018)
2. Support evaluation of offers from published tenders (Quarter 3/2018)
3. Review scheduling of projects with Municipality (Q3/2018)
4. Support identification of potential International Donor for the project (Q3/2018)

Next Steps: Municipality

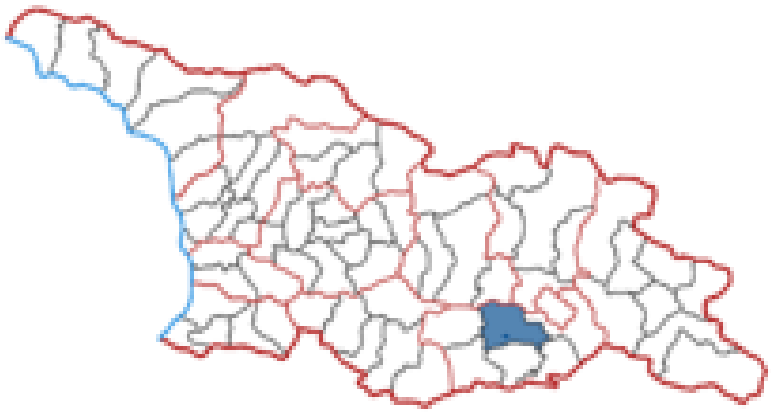
4. Finalise the Draft ToR for an Environmental Impact Assessment for the Park and environs (Quarter 3)
5. Publication of tender (Quarter 3)
6. Evaluation of tender offers (Quarter 3)
   Review potential scheduling issues (Q3/2018)

2.6.2 Tetritskaro Municipality

Case Study: Improvement of Water Supply to Tetritskaro and Rural Areas

General Information

In the Tetritskaro Municipality, a district near Tbilisi abundant in cultural heritage sites and short hiking routes and bike trips near Tbilisi, with a population of approx. 21,000 inhabitants, out of which around 17,000 inhabitants live in the rural area, water supply is lacking mainly in the rural area. There is an urgent need to identify good and reliable water sources for the rural areas, and to create interesting tourism facilities within the area.



It should be noted, that among 84 villages, 4 villages are absolutely empty.

There is a significant growth of production and trade turnover in Tetritskaro municipality, the employment increase rate is of 30%.

There is high potential for tourism development in Tetritsakro, but at the moment only few family hotels and low developed households are opened for this purpose. Lack of touristic facilities is a demotivation factor for population to produce additional products.

Entering Tetritskaro district from Tbilisi you can start exploring the area with present day Asureti, previously Elisabethal, where you can find old German cemetery, Lutheran church built in 1871 and 3-story unique German wine cellar and vineyards and many houses with remaining German style (Fachwerkhaus).

German heritage sites in Georgia were established by Shwabians, who escaped religious conflicts in Germany during times of Emperor Alexander I (1815-1818). One of those colonies, Elisabethal, nowdays Asureti, had strong agriculture and organization, their Lutheran pastor, head of the village Schulz, alley -lustgarden. Local Germans created water sewage system and the first Hydro power station for the village. Evgeni Reitenbach, who died in 1938 in Asureti, was the main winemaker for the Asureti wine cellar which produced 5,000 tons of wine.

Interesting hike could be done directly from Tetritskaro town to Gudarekhi Monastery XII-XIII cent. The complex consists of a ruined palace, living premises, a wine cellar, a pilastered building, and several other structures which date from the 12th-13th and 16th-17th centuries. The monastery and its marvelous bell tower (erected during the reign of Demetre II of Georgia in 1278) is in the woods so the last 3km from the Gudarekhi village to the Monastery should be the most enjoyable walk in the colorful spring/autumn seasons. On the road to the Monastery there are caves where soviet resistance hero Kakutsa Cholokavshvili was hiding.

Another significant historical monument of Tetritskaro district is Manglisi Cathedral (6-7th centuries). Near the cathedral you will find small artificial lake: Buratino Lake, also Arsena caves with nice field nearby, fantastic location for picnic and camping. Algeti National park routes start in Manglisi and the area is very beautiful in colorful seasons due to its mixed forests.

In addition, several lakes, ancient forest-parks and historic cultural attractions in the municipality provide good ground for tourism development

Municipality Infrastructure

In terms of infrastructure, it is important for the municipality to rehabilitate the roads, provide electricity, water supply, gasification and sewage system in the short and medium term. Out of 648 km roads in the municipality, only 14% has been asphalted, which is an impediment for the population, hindering the development of households, increasing the cost for transportation and not enabling safe transportation.

Education, culture and sport

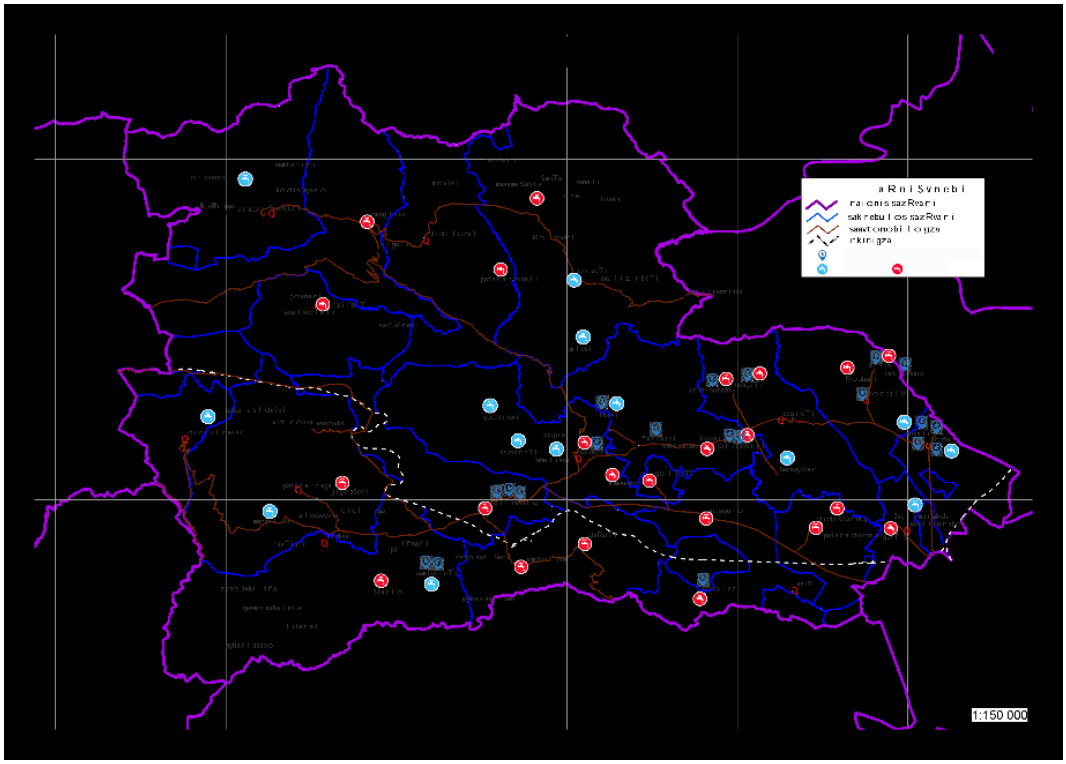
In the municipality pre school education is provided to 64% of population. It should be noted that there are resources available - 50% that are not utilized yet. Several kindergarten were rehabilitated, but there is a need for rehabilitation for schools as well. As for training centers, there is a Koda community educational center. Rehabilitation of infrastructure in sport and culture facilities is important.

Environmental protection

There is a problem of waste management issue, as budget allocation for solving this problem is 4.86%, too small compared to the real needs for waste vehicles and containers. The eradication of illegal landfills ensures sanitation and hygiene, while in the municipality the increased budget allocation for the waste management will reduce the risks of environmental pollution. Maintenance of forest parks and national reserves in Tetritskaro and creating attractive tourist atmosphere will greatly benefit to population.

The Location

On the map there are locations of localities with water supply (blue color) and without water source (red color). There are available water sources, like rivers and springs, which should be considered as water supply sources for the new investments.



Main problems identified:

The main problem in the municipality is the lack of water in most of the localities, therefore the need to prepare a case study for a water project in the municipality, as well as to identify other project opportunities for the rural areas within this municipality, has been identified.

Water supply will increase the access to better living standards, development of touristic facilities, and economic stability in the municipality and rural areas. Sewage system arrangement will be resulted in reduced infections and risk for getting disease. Formation of ecologically clean environment is a prerequisite for the development of tourism, which in turn positively impacts on household and small business development.

The main issues for the municipality in terms of future development include increasing private business sector, improving the road system to the farming communities, completing the water and sanitation system, exploiting the geographical and historical sites for tourism and developing more information booklets for visitors.

There are potential areas of support in respect of improving the broader improvement in tourism and giving support to their existing initiatives, and the Project will provide support in developing a project proposal for the water supply in the municipality and rural areas.

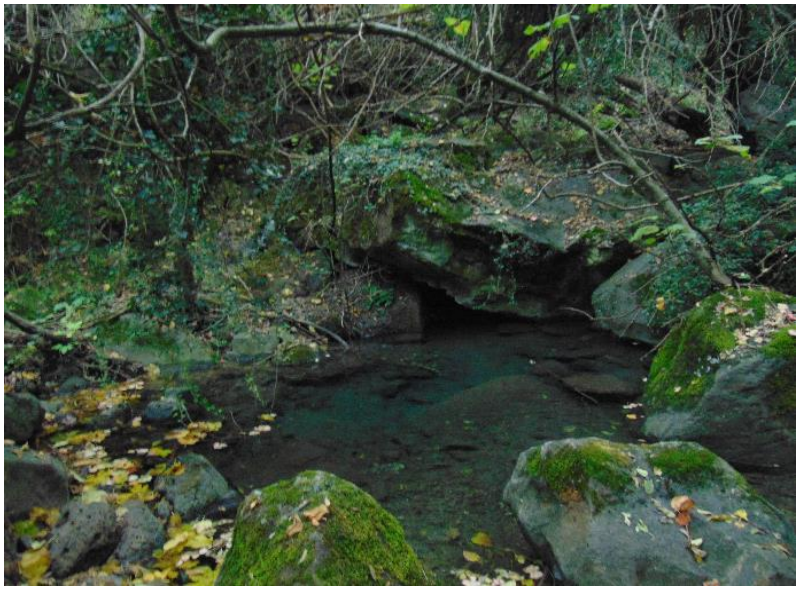
Existing water and wastewater systems

The water supply system problem is severe in the municipality.

In only 17 villages there is water available for the supply of the population, from groundwater sources. The authorities tried to identify additional water sources, but to some springs located in the vicinity of the municipality, the access is very difficult, and it should be initiated a study to measure the real water flows and stability of the water sources.

The sewage system is provided only in Tetritskaro capital and its length is of 14 km and requires complete rehabilitation.

The existing wells and absence of sewage system does not allow the protection of hygienic and environmental norms.



STAKEHOLDER MATRIX

Stakeholder	(Possible) Interests and concerns
Municipality of Tetritskaro	• Ensure water supply to population and businesses in all localities • Continuity of services • Source of finance • Support socio-economic development of the area, especially the tourism potential
City population	• Good water supply services • Good wastewater services • Affordable tariffs • Smooth relations • Responsive water company (prompt and correct actions when requested, required) • Clean environment
Business sector (existing and potential new customers)	• Good water supply services • Good wastewater services • Affordable tariffs • Smooth relations • Responsive water company (prompt and correct actions when requested, required)
Water Operator (UWSCG) + Municipal Water Operator	• More customers • Increase in turnover • Better tariff structure • New investments in the sector
Ministry of Environment	• Compliance with environmental standards • Improved quality of the water body
Ministry of Public Health	• Public health aspects
Contractor construction works	• Attractive customer • Good price and payment • Smooth procurement procedure

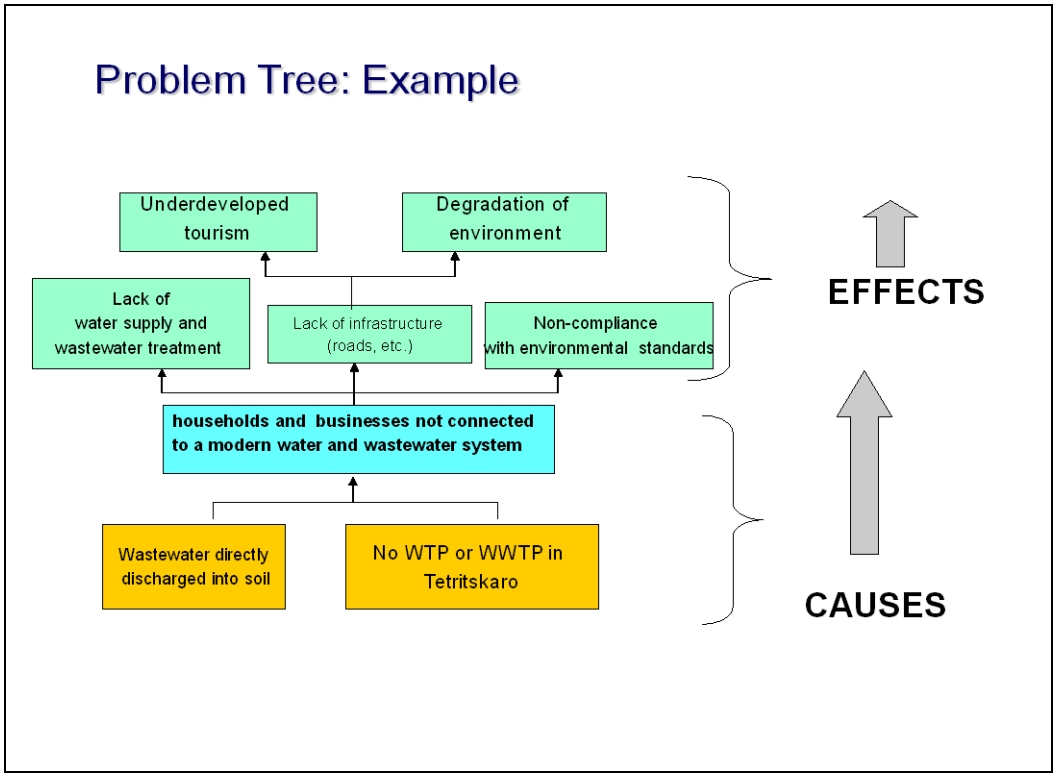
	• Good reputation (the contractor's reputation is often attached to it) • Visibility of their contribution (e.g. signboards)
Suppliers	• Attractive customer • Good price and payment for goods and services • Smooth procurement procedure • Transparency, access, fair competition.
Public infrastructure agencies (electricity, telephone, gas, cable network, roads)	• Information exchange about location of water supply and wastewater pipelines (in case of activities on their own networks) • Smooth contacts in case of extension and repairs. • Permits and other approvals (mutually) for construction works and repairs. • Joint planning, co-ordination of extension and major overhaul.
Free-time spenders, tourists	• Nice and clean environment, entertainment value of surroundings • Access to protected areas • Access to historical sites
Mass media (press, TV, radio)	• The water company can provide news, can be an 'issue', has entertainment value. • The Municipality can use these as means of promotion, dissemination of information regarding the investments to be initiated and implemented.
Volunteer organisations (NGOs, citizens groups)	• May have relevant or related activities, projects with regard to scope of municipality (e.g. social assistance, small infrastructure development, information, environmental protection) • May be (co)-sponsor of relevant activities.

Simplified Problem Tree

Once the potential issues had been identified they were reviewed to see how these different issues were inter-related, and a form of graphic, or "tree" was elaborated which showed the connections. The exercise is useful in determining the scope of the Impact a successful project should deliver and to see whether there are factors that need to be additionally implemented which will be outside of the project control.

The additional benefit is in identifying the added value the project provides, and to make a preliminary assessment of what will be the changes envisaged by the project and whom will be responsible for sustaining these after project closure and hand-over has taken place.

Following this analysis, there appears to be a range of reasons for why such an investment would prove to be an advantage to the municipality if new water sources would be identified.



Conclusions

The purpose of undertaking this approach is to ensure that as the project concept is being developed, the designers are fully aware of ALL the potential issues and problems that will be addressed by the project once it begins its implementation and enables the drafting team to identify what the Terms of Reference should contain.

Next Steps:

1. Support drafting of Terms of Reference - Subject of analysis:
   - Description of current state and main problems and shortages of the system in place
   - Demand analysis including demographic analysis and prognosis, water production and utilisation, waste water production
   - Technical and technological analysis – capacity of the water sources (surface water, groundwater, springs), quality of the water sources (need for water treatment)
   - Option analysis – comparing options of water supply from surface water or from groundwater and springs.
   - Financial analysis of the project including capital costs, sources of financing, operating costs (including depreciation), operating revenues, working capital and calculation of financial indicators (NPV, IRR)
   - Organisational and legal analysis to determine the best way of project development, implementation and operation.
2. Publication of tender (Municipality)
3. Support evaluation of tender offers

Case Study: Tetritskaro Water Supply

Part 2

1. General Information

Additional information for the project background

Tetritskaro municipality is located in south-east part of Georgia and is the self-governing entity of Kvemo Kartli territorial-administrative unit. To the north the municipality borders Kaspi and Mtskheta, to east – Gardabani and Rustavi city, to south-east – Marneuli, to south – Bolnisi, to south- west – Dmanisi and to west – Tsalka municipality. Tetritskaro's administrative centre is in 57 kms from Tbilisi, and distance to Rustavi is 60 km. Highways of international and national importance cross the municipal territory. It is an important entity in respect to the transport routes.

The municipality's territorial area is 1175.5 square/km [117 446 ha]; out of which 50,616 ha is agricultural land, which is 63% of total area. 18,028 ha is arable land (36% of agricultural land), 21,142 is hay and pasture land (63% of agricultural land) and 446 ha – orchard (1% of agricultural land).

The climate in Tetritskaro municipality is moderately damp. Winter is mildly cold, and summer is warm. Average annual temperature is around 12-13^0. Average temperature in January fluctuates between 0^0-10^0, and in July – between 15^0-24^0. Average annual precipitation varies from 500 - 900 mm; average number of sunny days per year is around 220, while rainy days are up to 70.

The density of hydrographic network in Tetritskaro municipality is high. All rivers of Tetritskaro create unit network of Mtkvari river. In the southern part of municipality river Khrami is an important river together with its tributaries: Aslanka, Chivchiva, Akhkalafistskali and Tetritskarotskali. River Khrami creates a canyon in its basin; its length is 22 km. River Algeti flows in the central area of the municipality, which crosses entire municipality. The main source of water for Tertritskaro Municipality is rainwater. Floods are typical in spring and early summer, and low water levels - during autumn-winter. Algeti reservoir, which is used for irrigation, is created in the middle of Algeti river flow.

Tetritskaro Municipality is rich with mineral resources. Mines and carriers of basalt, ores, white stone, lime and manganese can be found on the municipality's territory.

Algeti national park is in the northern part of the municipality. The park is at 1100 - 2000 meters from the sea level and is spread over 6,822 ha. There can be found 1,644 varieties of plants, including 250 types of mushrooms. Also, 3 types of plans are Caucasus endemic-species. The municipality has reach fauna. There can be found both mammals, as well as variety of birds and amphibians. Some of the fauna species of the municipality are on the "Red list" of Georgia.

There are 90 villages, one small town (daba) and one town in the municipality. Out of them, 13 villages are unpopulated, and population of 6 villages is less than 5 people. The municipality is divided in 20 territorial-administrative units, 18 out of which are community type units, one small town (daba) and one town.

Administrative units and villages of Tetritskaro municipality					
#	**Administrative unit**	**Village**			
1	Tetritskaro town	Tetritskaro town			
2	Manglisi (daba) small town	Manglisi (daba) small town	Algeti		
3	Asureti	Asureti	Enageti	Shavsakdari	
4	Akhalsopeli	Akhalsopeli	Gokhnari	Zirbiti	Sapudzvrebi
5	Borbalo	Borbalo	Ertisi	Vashlovani	Goubani
6	Golteti	Golteti			
7	Dageti	Dageti	Samshvilde		
8	Durkuni	Didi Durkuni	Patara Durkuni		

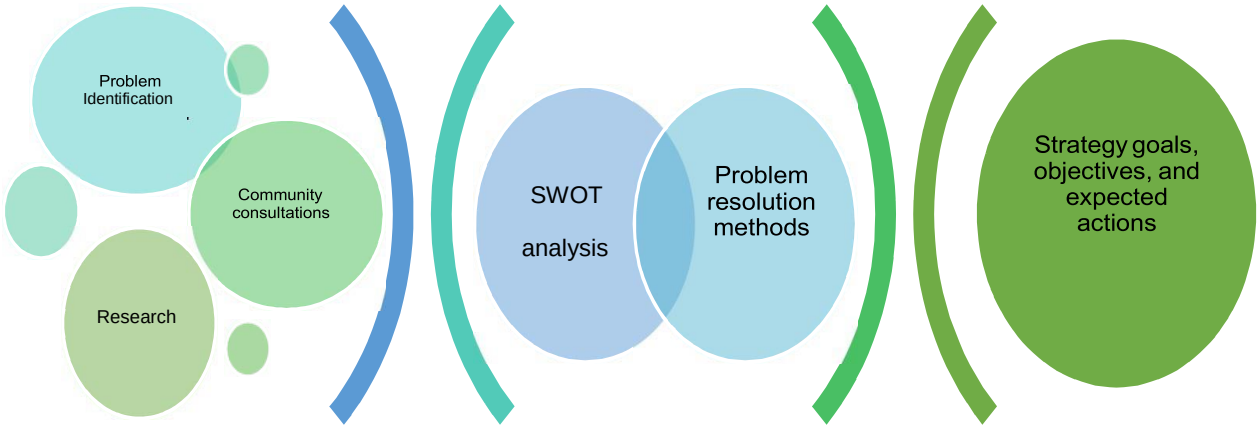
9	Toneti	Didi Toneti	Patara Toneti	Mokhisi	Tskhrakudiani
10	Iraga	Patara Iraga	Alekseevka	Didi Iraga	Vizirovka
		Ivanovka	Menkalisi	Navtiani	Jigrasheni
11	Kldeisi	Didi Kldeisi	Patara Kldeisi		
12	Koda	Koda	Mukhati		
13	Marabda	Akhali Marabda	Kotishi	Zveli marabda	
14	Orbeti	Orbeti	Amlevi	Akhali Zirbati	Didgori
		Dre	Vanati	Naosari	Pantiani
		Lastitsikhe	Meore Shamta	Gvevi	Lilovani
		Shamta	Tsveri	Tskluleti	
15	Shekhvetila	Shekhvetila	Arkhoti	Didi Namtviriani	Zemo Chinchriani
		Kodis Tskali	Napilnari	Patara Natvriani	Ugudeti
		Kvemo Chinchriani	Jvriskhevi (polana)		
16	Chkhikvta	Chkhikvta	Abeliani	Gudarekhi	Vake
		Matsevani	Tbisi		
17	Tsintskaro	Tsintskaro	Qosalari	Qsovreti	Khopisi
18	Chivchavi	Chivchavi	Dumanisi	Zemo Akhasheni	Zemo Akhkalapa
		Ipnari	Lipi	Samghereti	Fitareti
		Shikhilo	Tsknari abano	Kvemo Akhkalapa	Kvemo Akhasheni
19	Khaishi	Khaishi			
20	Jorjiashvili	Jorjiashvili	Ardis ubani	Bogvi	Sagrasheni
		Fartskhisi	Abrameti		

The municipality population is 21,127. Total population has significantly decreased since 1989 and 2002 censuses. Over the last 25 years the population has become almost twice less. According to the 1989 census, 36,432 people lived in Tetritskaro. 85% of the population live in the village type (village, small town) settlements. Population of the only town of the municipality is not more than 3000. 52% (10,792) of the population are females, and 48% (10,335) are men.

85% (17,424) of total Tetritskaro population are Georgians. 7-7% (1548 and 1544) are Azeris and Armenians. There also live Russians (1.3%), Greeks (0.85%) and Ossetians (0.4%).

Communities living on the municipality territory enjoy the benefits provided by the mountain law. 49 villages, one small town (Daba) and one town meet the criteria identified by the mountain law.

2. The strategy development process



According to the local authorities, four priority directions of Tetritskaro development strategy have been identified:

- Environmental protection, management of natural resources and disaster risk reduction
- Support to competitiveness and modernization of the agricultural and non-agricultural initiatives
- Support to development of rural tourism
- Development/rehabilitation of the rural infrastructure

Relevant for the scope of the case study are the following priority directions:

- ***Environmental protection, management of natural resources and disaster risk reduction***

Environmental protection, management of natural resources and disaster risk reduction is one of the core elements for sustainable development of Tetritskaro municipality, which is connected to and influences effectiveness of other strategic directions of Tetritskaro development. This strategic priority aims to:

Tetritskaro municipality is quite rich with natural resources, as revealed though its diverse landscape and eco system; however, these resources are not properly managed or cared for. Illegal mining of natural resources, challenges with management of municipal waste, absence of disaster risk reduction interventions and generally very low level of environmental awareness are among the most urgent environmental problems in Tetritskaro.

Environmental problems are mainly related to low awareness among local population. Lack of information or no access to information provokes and encourages environmental issues. Raising awareness among local communities is one of the first steps for achieving real changes, which can be done through information campaigns (including, sharing information about existing risks).

Goal	Objectives	Activity/expected projects
Contribute to reduction of negative impact of environment and effective management of resources	3.1 Environmental protection and disaster risk reduction	Support improvement of municipal waste management system Support arrangement of innovative demonstration units for waste recycling Support actions for identification of illegal utilization of natural resources (such as, video/online supervision) Support development of disaster risk assessment methodology and development of emergency management plan Support/lobby introduction of standards for energy effectiveness and renewable energy sources
	3.2. Supporting introduction of effective mechanisms/method for registration of natural resources	Support introduction of natural resource registry at municipal level Support introduction of methodology for registration of resources at the municipal level and mechanisms for responding to the cases of environmental pollution/impact
	3.3. Supporting registration of natural resources and implementation of interventions that raise awareness and teach about environmental protection and disaster risk reduction	Support activities for raising awareness about existing risks Support programs for raising awareness regarding environmental and DRR issues Support introduction of food safety standards (trainings) Support awareness raising activities regarding renewable energy sources Support awareness raising activities regarding plant protection means and their correct application

- ***Development/rehabilitation of rural infrastructure***

Supporting development of rural infrastructure is one of the core directions for Tetritskaro development strategy.

There are lot of infrastructural problems in Tetritskaro, which on the other hand prevents development of other strategic directions.

Poor maintenance of road infrastructure, mismanaged underground utilities, incomplete gasification, limited access to drinking water, etc., prevents development of tourism and entrepreneurship sectors in the municipality.

Also, poor quality of the irrigation systems, unmanaged Transhumance routes, etc., is a challenge to effective functioning of different sectors of agriculture.

Access to potable water is an exception, named as the most important problem in the municipality.

There is an urgent need to carry out interventions in support to improving access and quality of the drinking water, specifically through supporting filtration and setting up potable water distribution network.

A SWOT analysis of infrastructural sector of the Tetritskaro municipality is presented below:

Strengths	Weaknesses
Cultural heritage Rich natural resources Road/railway of local and international importance Agricultural and non-agricultural land resources Ongoing international projects Planned projects on local and central levels	Limited access to financing Lack of qualified staff Low salary levels Bureaucratic mechanisms; complicated legal regulations at central and local levels Lack of public spaces Poor accessibility of vocational education Low awareness about existing services Ineffective utilization of existing resources
Opportunities	**Threats**
Current conditions of infrastructural (existing roads, buildings, potable water constructions) Readiness of municipality to implement infrastructural projects Readiness of municipality for cooperation with donors	Non-prioritisation of infrastructural development at local level by the state Possibility of damaging cultural-historical monuments Natural and technological threats Degree of impact of mining companies on environment Political instability

Goal		Objectives	Activity/expected projects
Support rehabilitation and development of infrastructure of Tetritskaro municipality		1. Support accessibility to water resources	• Improve access and quality of potable water (filtering/supply network expansion) • Support effective functioning of irrigation system
		2. Advocate for issues related to rural infrastructure and identify alternative sources of financing	• Registration and assessment of community buildings • Support construction/development of multifunctional (e.g. cultural- educational, sport-recreational, ritual, touristic-informative) centres • Support development of proper infrastructure for preschool institutions • Rehabilitation and equipping of parks
		3. Advocate for issues related to rural infrastructure and identify alternative sources of financing	• Advocate for resolution of problems related to the gasification, internal road infrastructure, underground utilities, and medical points • Identify and establish partnership with organizations implementing infrastructural projects/programs at the local level

Next Steps: PCM Project Team

5. Support development of ToR for a water or wastewater project (Quarter 3 /2018)
6. Review documents for an o-going water project with Municipality (Q3/2018)
7. Support identification of potential International Donor for the project (Q3/2018)

Next Steps: Municipality

7. Finalise the Draft ToR for a water or wastewater project (Quarter 3 /2018)
8. Publication of tender (Quarter 3)
9. Evaluation of tender offers (Quarter 3)

2.6.3 Tsalka Municipality

Case Study : Infrastructure and Tourism Development

The relationship between Infrastructure projects and Tourist development in Tsalka

Tsalka is located in southern Georgia with a population of approximately 19,000 and according to the 2014 census comprises a mixed population of Georgians, Armenians, Aziri, and Caucasian Greeks. This is a cosmopolitan society and provides diverse opportunities for different developments.

The tourism activities have the support in principle of the Agency for Tourism and in recent years the municipality has tried to refine their approach and activities in respect of a number of potential tourist developments.

There are a number of interesting and attractive geophysical features in the immediate area around the city. These include important historical monuments in Tsalka; Kldekari Fortress (ninth century) and the church of St.George in Dashbashi (tenth-eleventh centuries), and Dashbashi canyon is also an interesting tourist attraction which is one of the largest canyons in Europe and which last year attracted a large number of tourists from Georgia and Internationally.

Historic fortress

Dashbashi Church

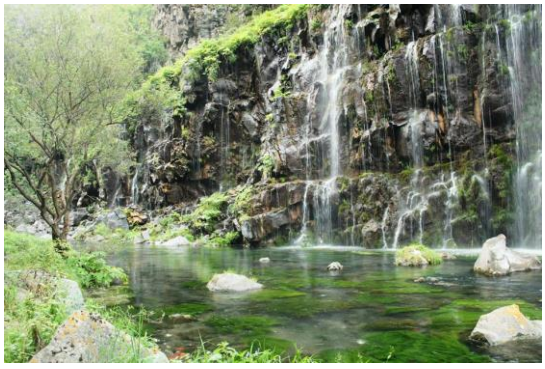
Other analysis by the private and nongovernmental sectors have identified potential areas in need of support and there are opportunities to exploit some of Tsalka's eye-catching natural landscapes and hospitable farmers which provided the basis for developing agri-tourism and eco-tourism in the municipality as well as more traditional tourist attractions. In particular improvements to tourism infrastructure in Tsalka and training for potential tourism service providers were provided by the Food and Agriculture Organisation (FAO) in 2017 in respect of agri-tourism.

The town has recently undergone some infrastructural upgrading and is now improving its ability to host tourists, offering them better touristic infrastructure, new tourist routes and better trained tourism service providers. However, there are still considerable improvements possible and these need to be carefully managed.

For example, three touristic routes were identified for three different types of "active" tourism – one for hiking, one for bicycle touring, and one for automobile touring. The routes were laid out to include most of the important cultural and environmental points of interest in Tsalka – the famous Dashbash canyon, 22 cultural heritage sites including churches dating back as early as the 11th century, and guest houses and farms offering products for tourists.

Identifying possibilities to enhance the capacity of the area's tourism sector was another aspect of the draft programme. Some 25 potential tour guides – 12 women and 13 men – from 13 different villages of Tsalka municipality attended three days of intensive training. The course covered rural tourism and guesthouse operation standards, marketing and business plan development and ecotourism principles.

It is intended to assist in developing and promoting several potentially attractive tourist sites. The ambitions of the municipality are to improve the existing facilities to accommodate this increased interest and to exploit additional possibilities. At present there are too few hotels, refreshment places and other suitable shops. The municipality has created some "pic-nic" places near the canyon, but there is potential for far more investment if they can create the appropriate commercial environment.




Canyon

PCM approach applied to Tourism development

The PCM approach utilises a number of different techniques to identify potential projects, and these can be adapted to different purposes with specific project requirements. In this case, the Stakeholder analysis matrix and the METAPlan approach can be used to identity particular Infrastructure projects and programmes, which can support different tourist activities and objectives.

In respect of tourism in Tsalka, the following potential areas and ideas were identified during initial discussions. These form the basis for furthermore detailed analysis of the options and potential for each alternative based on the realistic assessment of the involvement of the different actors, and to identify how the projects interact and influence each other.

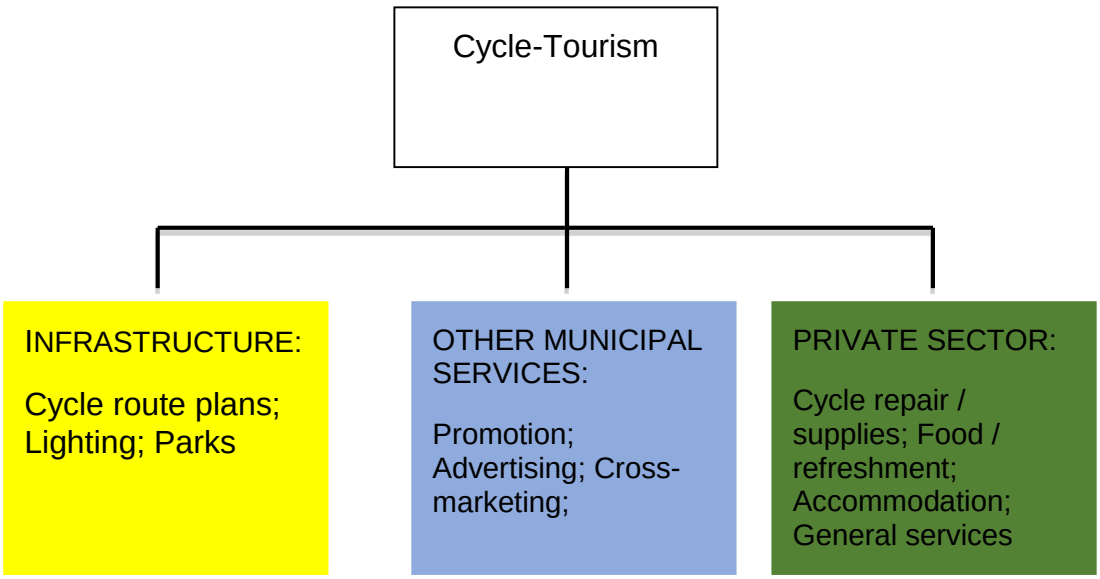
The step by step method that underpins the PCM approach asists in the careful analysis of the potential alternatives and helps to focus the thinking into clarity, and importantly, posing the right questions about the alternatives.

On the following pages, each of the main tourist ideas is examined in more detail, utilising the PCM approach to highlight potential Stakeholder expectations and obligations. The questions arise for the Infrastructure services division, the wider needs of the municipality, and the potential issues for third party investors.

The principle purpose of the PCM approach is to raise questions and identify areas where clarifications can lead to better cross-referencing to other projects and to identify where collaborations exist. It also serve as a basis for ensuring that projects are developed with a high level of cohesion and avoid unnecessary duplication of activities or 'double work'.

Touristic potential areas of development

1. Touring (tourism) by bicycle has been a feature since the last 19th century, although it has only become a popular staple of tourist activity since the 1980s. The municipality boasts many different types of features that could be attractive to a cycle tourist, and these need to be developed in conjunction with other tourist activities, promotions and facilities.



Issues that need to be resolved for Infrastructure services:

- Identification of appropriate cycle paths
- Identification of potential "rest areas" and other places
- How to organise appropriate lighting and safety for cyclists
- Where to create economic environment for investment

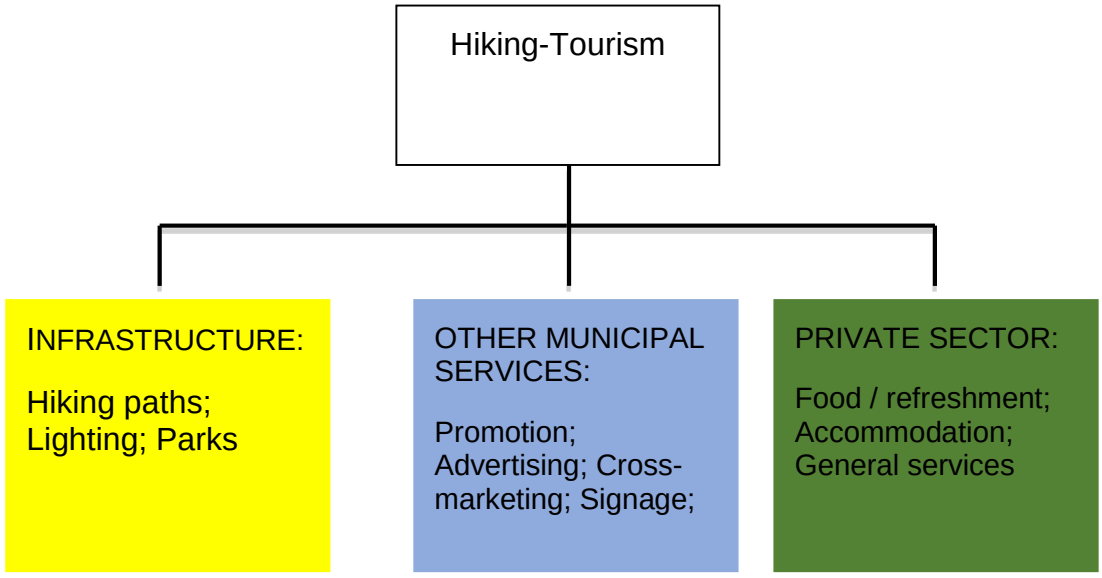
Issues that relate to Municipal services:

- Development of a promotional policy and plan
- Is there a need or opportunity to involve other municipalities?
- How to develop the involvement of National tourist agency?
- What additional services should the municipality provide?
- How many alternative investors have been identified?
- How is that being done?
- Is there a need to establish a more formal tourist information bureau(eux) across the municipality? If so, what provision has been made for this?

Issues that relate to third parties:

- Is there sufficient / potential demand among investors to exploit business opportunities
- Are the needs of potential investors understood by the municipality?

2. **Hiking (and trekking**) is a long-established pastime, and the combination of relatively inexpensive flights into Georgia (mainly to Kutaisi) has enabled those tourists who pursue this type of holidays far more opportunity to explore countries and places otherwise too difficult or expensive to visit.



Issues that need to be clarified by the Infrastructure services:

- Review and confirmation of paths
- Identification of potential “rest areas” and other places en-route
- How to organise appropriate lighting and safety concerns (fencing/roping-off etc.)
- Creation of “staging posts” for tourists using the hiking routes where they can pause/rest (how and by whom needs establishing)

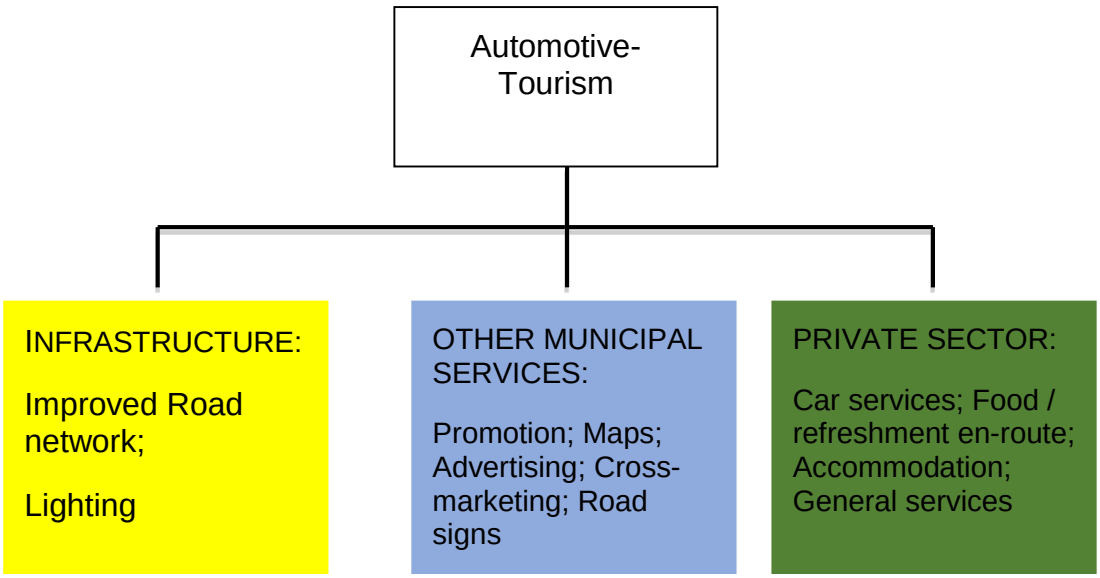
Issues that relate to Municipal services:

- Development of a comprehensive promotional policy and plan
- Is there a need to seek the involvement of the National tourist agency? (If so, what and whom will be involved)
- Is it clear what additional services the municipality should provide for tourists?
- Is there a need to establish a more formal tourist information bureau(eux) across the municipality? If so, what provision has been made for this?

Issues that relate to third parties:

- What are the actual business opportunities?
- Are the needs of potential investors understood by the municipality?
- How will private sector be involved in the future

3. Touring by car can have many objectives. This is reflected in, for example, the "wine routes" in Georgia, or a schedule to visit historic churches, or archaeological sites. What is relevant for the project discussions are not the specifics of the tour, but the requirements common to all of them when it comes to identifying the implications on the different municipal services.



Issues that need to be resolved for Infrastructure services:

- Confirmation of appropriate routes
- Identification of potential "rest areas" and other places
- How to organise appropriate signage and directions
- Where to create economic environment for investment opportunities
- Clarify what infrastructure services are necessary in these areas
- Have specific plans been outlined for automotive services along the designated routes? What are the infrastructure implications?

Issues that relate to Municipal services:

- Development of a promotional policy and plan
- Is there a need or opportunity to involve other municipalities?
- If so, will they also deal with road signage and a common approach?
- To what extent is it necessary to involve the National tourist agency?
- What additional services should the municipality provide?
- Have any investors have been identified?
- How is that being done?
- Is there a need to establish a more formal tourist information bureau(eux) across the municipality? If so, what provision has been made for this?

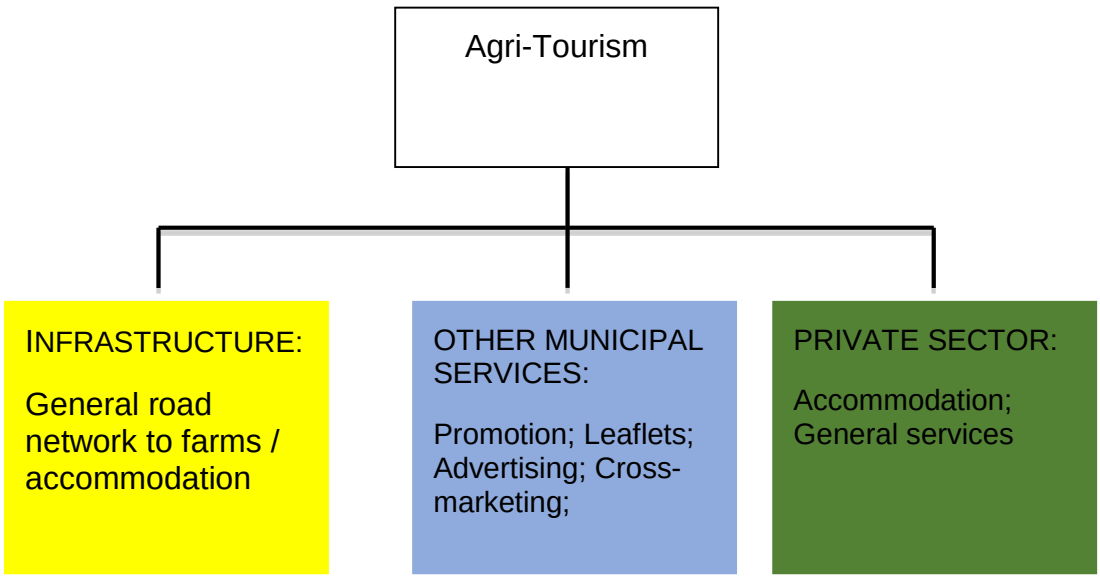
Issues that relate to third parties:

- Is there sufficient / potential demand among investors to exploit business opportunities
- Are the needs of potential investors understood by the municipality?
- Are there any opportunities for some support or assistance from the municipality?

4. Agri-tourism is a more specific alternative for potential tourists as the core feature of the option is based around residency on a working farm. It is defined most broadly as involving any agriculturally based operation or activity that brings visitors to a farm.

This means that the key issue for the infrastructure services division is on ensuring adequate accessibility by tourists. Other municipal cervices may be required to provide additional support services.

It is a form of niche tourism that is considered a growth industry in many parts of the world including some Baltic countries, the Far East and Northern America.



Issues that need to be resolved for Infrastructure services:

- Identification of potential difficulties in creating the necessary road network to the participating farms
- Consideration of additional lighting and safety of tourists arriving at farms

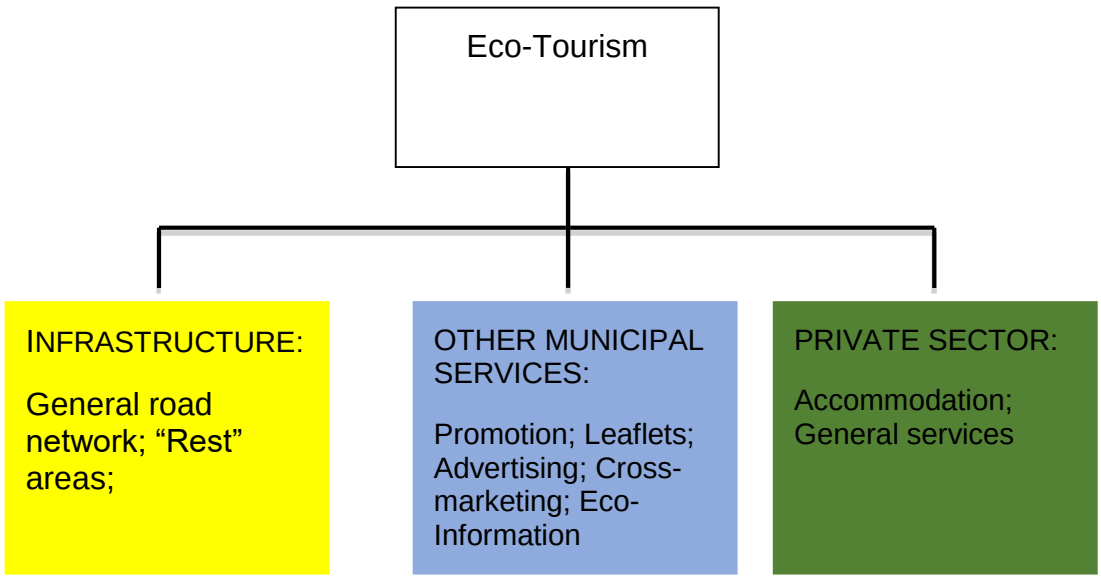
Issues that relate to Municipal services:

- Development of a promotional policy and plan?
- Is there a need or opportunity to involve other municipalities?
- How to develop the involvement of National tourist agency?
- What additional services should the municipality provide?
- How many alternative investors have been identified?
- How is that being done?
- Is there a need to establish a more formal tourist information bureau(eux) across the municipality? If so, what provision has been made for this?
- Do participating farmers expect additional support from the municipality?
- Are the needs and expectations of potential tourist fully understood by them?
- Have alternative types of agri-tourist farming been discussed with stakeholders?

Issues that relate to third parties:

- Is there sufficient / potential demand among investors to exploit business opportunities
- Are the needs of potential investors understood by the municipality?
- Are the consequences on "normal" farming activity acceptable?

5. Ecotourism is a relative newcomer to tourist opportunities. It is generally regarded as being a form of tourism involving visiting fragile, pristine, and relatively undisturbed natural areas, and is intended as a low-impact and often small-scale alternative to standard commercial mass tourism. In practice it means responsible travel to natural areas conserving the environment and improving the well-being of the local people.



Issues that need to be resolved for Infrastructure services:

- Identification of appropriate locations for infrastructure development
- Consideration of Environmental impact
- Preparation of appropriate access to more remote locations
- Identification of potential “rest areas” and other places to support ecotourism
- Where and how to create a sensitive economic environment for potential investment

Issues that relate to Municipal services:

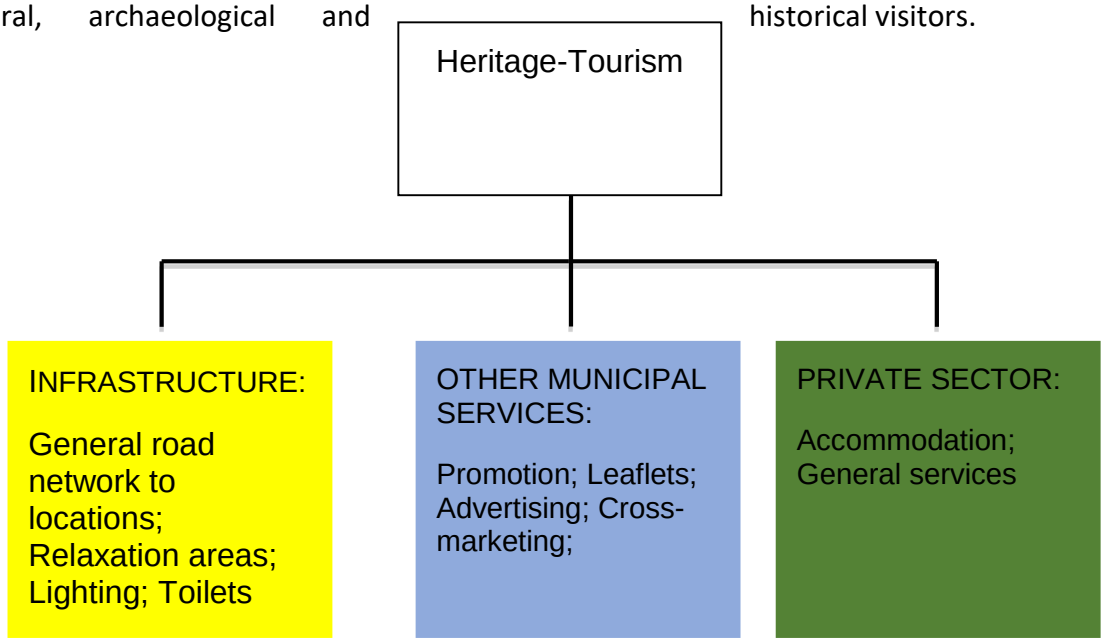
- Development of a promotional policy and plan
- How to develop the involvement of National tourist agency?
- What additional services should the municipality provide?
- Have investors have been identified?
- How is that being done?
- Is there a need to establish a more formal tourist information bureau(eux) across the municipality? If so, what provision has been made for this?
- Preparation of detailed maps, guides, route plans etc.

Issues that relate to third parties:

- Is there sufficient / potential demand among investors to exploit business opportunities
- What are these opportunities?
- Are the needs of potential investors understood by the municipality?

6. Heritage (or historical) tourism is oriented towards the cultural or historical features of a country, region, or city. The focus is on visiting “the past” either for education, or simply to enjoy the creation of human activity. Famous examples would include visiting the ancient “wonders of the world” such as the Pyramids in Egypt.

In respect of Georgian history, as a key staging post on the ancient “silk road”, and as a meeting point of many ancient cultures, the country offers extensive potential for religious, cultural, archaeological and historical visitors.



Issues that need to be resolved for Infrastructure services:

- Identification of appropriate sites of historical / archaeological interest
- Identification of potential “rest areas” and other places on-route or at the locations
- How to organise appropriate safety for tourists
- Where to create economic environment for investment

Issues that relate to Municipal services:

- Development of a promotional policy and plan
- Is there a need or opportunity to involve other municipalities?
- How to develop the involvement of National tourist agency?
- What additional services should the municipality provide?
- How many alternative investors have been identified?
- How is that being done?
- Is there a need to establish a more formal tourist information bureau(eux) across the municipality? If so, what provision has been made for this?
- How to ensure the historic / archaeological sites are preserved and safe from damage

Issues that relate to third parties:

- Is there sufficient / potential demand among investors to exploit business opportunities
- Are the needs of potential investors understood by the municipality?

Conclusions

The use of this approach can assist in identifying what additional factors are required for the development to have the maximum impact, and in this case the involvement of the private sector is important. This may require the municipality to adopt different approaches to encouraging investment.

Next Steps:

1. Elaborate more completely the involvement of the different groups by revisiting the Stakeholder analysis for each of the potential tourist opportunities.
2. Review the practicalities of each of the proposed interventions based on Stakeholder analysis and identify any negative factors or features of the stakeholders
3. Revise the expectations and implications for the Infrastructure services division and the municipal services.
4. Draft project plans based on refined project ideas and requirements
5. Prioritise the programme accordingly
6. Investigate financial alternatives

Municipal Development Strategy

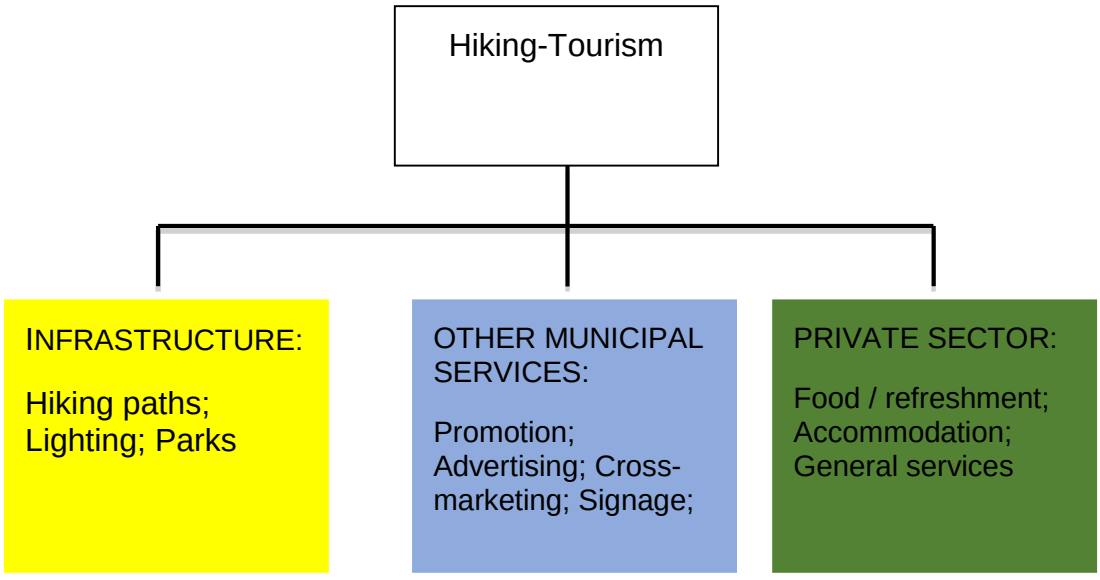
Part 2

Tourist development in Tsalka and its position in a more general Municipal plan

As the municipality begins to examine further their ideas for economic development it became clear that there should be more clarity on how such a plan or project(s) fits into a more general development programme for the municipality.

As was previously identified, there are many potential opportunities for economic development based on a variety of touristic options and offers. This next phase integrates the potential projects into a more general plan and identifies the possible cross-links and inter-dependencies between the specifics in this project, and other development possibilities.

From the previous analysis the municipality had an outline of what such a concept would comprise and the core idea on hiking is replicated below. However, this project idea has now been refined into a more general form of track or walkway, which can in fact be used by tourists in foot, or by other means of transport, including cycles and even horses. (The latter would require the investment of a third party but should be considered during the design and identification phases.) The original, more limited idea is replicated below.



Following further thought and discussions, the concept is evolving into a more utilitarian idea of a single, multi-purpose track or route initially connecting the centre of Tsalka with the canyon, with additional routes to be determined once this preliminary route is connected and assessed. In addition, a “rope” bridge or walkway would be constructed connecting both sides of the canyon to provide an additional tourist resource, and to create an alternative “sight-seeing” opportunity.

The idea now is to connect the canyon with the objective of bringing other heritage sites together with some form of multi-purpose track, which would be relatively moderate for walking, but can also be used by other types of user, at a later stage.

The 'rope' bridge would connect two sides of the canyon

This further analysis was based on a Stakeholder assessment of the different tourist types who might view such a facility positively, and encourage their stay in Tsalka.

This showed that there was no real difference in expectations between Georgian and International tourists due to their nationality, but there were common issues and needs among the stakeholder types overall.

Such groups were identified as:

- Disaggregated by age: young, middle aged, older
- Disaggregated by family relationships: single, young family, couple no children
- Disaggregated by activity level: serious hikers, casual hikers, general tourists

It was further identified that Tourist Stakeholders wanted a wide range of different facilities although almost every type of Stakeholder wanted the minimum access to most of the identified needs:

- Variety of "challenges" with the walks
- Alternative ways of taking the "walk", i.e cycles, horses, on foot
- Potential 'rest' areas
- Site-seeing: natural, historic, archaeological
- Options to buy food/refreshments
- Pic-nic areas
- Child-friendly areas

- Safety of the walk (particularly for children and older tourists)
- Appropriate lighting
- Toilet / 'comfort' facilities
- Shops selling appropriate equipment, clothing etc.

When the project is designed all of these considerations need to be assessed and where possible brought into the project activities. Many of these refer to the actual location, or design of the chosen route, but in addition the design has to identify those which are supplementary to the route itself and either ensure it is safe or offers variety and additional services and features.

In addition, access to the canyon itself needs to be upgraded, and this will be competed concurrently with the creation of the cycle/foot path to the canyon. Existing paths are difficult to use and have a potential health hazard as they are uneven and run down a steep slope.

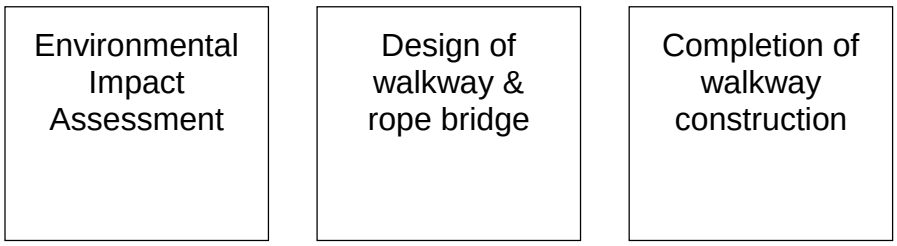

Looking further ahead to the cooperation with the private sector, the role of the municipality in creating a friendly environment for investment should also be considered as this will have to form one component of any project that is implemented as the success of the tourist route may be contingent upon these additional features and services.

For example, the municipality itself is unlikely to be managing a café, but it needs to ensure that conditions exist at a suitable point in relation to this hiking path that makes this an attractive possibility for an investor. This requires the implementation of appropriate infrastructure facilities, roads, water, electricity, canalisation etc. and must therefore also be part of project activities, either directly under this project, or complimentary under another project.

If the latter, then there needs to be close project coordination to ensure that the outputs of the respective project activities are compatible with the final timeframe of the hiking route.

A further consideration is how, if at all, the municipality should be "marketing" or promoting this new feature for potential tourists. The cooperation of national or regional promotion, together with any local initiatives has to be considered. Either these rest as activities in the project, or are necessary external factors, which the project should be monitoring. The cooperation with other local municipalities is an additional factor that should be considered at the design stage for the project concept.

With these various factors in mind, a form of Logical Framework can be developed following the model. Such a LogFrame would probably comprise the following Components, or Result-Chains, but this would be confirmed during the final design stage if the project idea was approved for implementation.

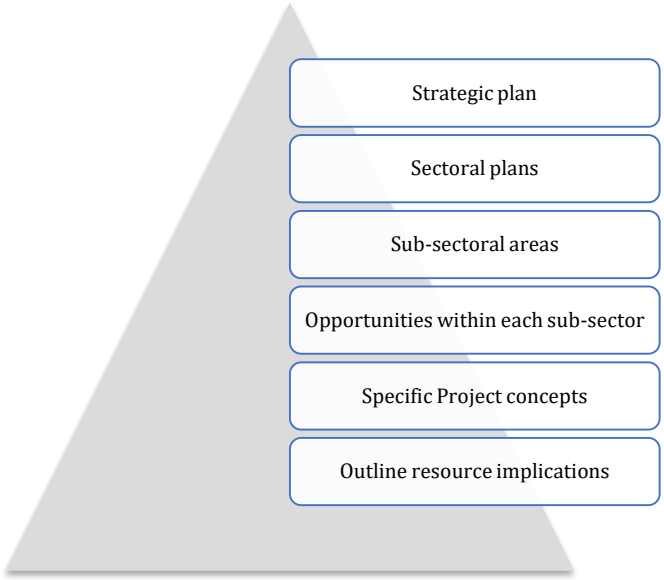


These would be completed with an assessment of the resource implications for each output, and the necessary Human Resource and financial requirements and the external factors, including the promotion and advertising of these new facilities.

Finally, the project should also have some identified indicators for the various activities and outcomes expected (referred to as OVIs – Objectively Verifiable Indicators in the PCM approach). The challenge for the municipality is that there are few reliable statistics for tourism, accommodation stays, general economic activity etc. to tourism and this increases the difficulty of identifying realistic OVIs. It may be that the project will also have to include as activities some data collection methods and approaches.

So, the analysis of touristic potential has moved to the stage of beginning to refine a project idea. The next step will be to complete a form of Project Concept paper or outline project. This, together with the other project ideas identified through the strategic disaggregation process will inform the municipality about its choices, and the resource implications for, not only the infrastructure services division, but other services and department. It may also identify Human Resource gaps and lend additional criteria to the selection of projects across all services in the municipality.

The point of the approach is to remain flexible in identifying potential projects, adapt them as necessary until a realistic project idea can be formulated, and then consider the implications across the entire municipality in terms of its various resources, human and otherwise. Throughout this process, as other project ideas are identified and refined their relationship to the overall Municipal planning must be consistent. The model for this is illustrated below.



General Project Concept paper

Objectives of the action = IMPACT	To increase tourism by x% (to be based on realistic possibilities) To increase economic activity in the Municipality by x% (to be based on realistic changes) To increase employment opportunities by x% (based on actual activity and realistic possibilities)
Target group(s)	Municipal infrastructure assets
Final beneficiaries	Tourists (National and International) Entrepreneurs (Hoteliers, Restaurateurs etc.)
Estimated results	New hikers/cyclists' route accessible Increased tourist activity
Main activities	Environmental impact assessment Route design Route development Completion of subsidiary features, (e.g. pic-nic areas; play areas etc. as applicable)

Description of project activities

1. Preparation of Environmental Impact Assessment
2. Design of feasible Project for creation of Mountain walking / cycling route(s)
3. Design of appropriate promotion activities

Relevance of the project to Municipal Strategic objectives

The creation of alternative tourist services and activities will increase potential Tourism and offer new options for visitors thereby increasing municipal revenues and general economic activity.

Target Group(s)

Once completed the mountain route(s) will attract interest from a more diverse tourist group, including active tourists, walkers, hikers, and cyclists both Nationally and Internationally

Any additional "added-value" impacts

The development of alternative "offers" for tourist will result in greater tourist activity and visitor volumes. These additional visitors will require more services, such as new/alternative types of accommodation; new and varied food/refreshment options; and access to new shops and services. These create possibilities for investors to identify specific products or services and thereby increase economic activity and profitable ventures.

Next Steps: PCM Project Team

1. Support municipality in development of ToR for the contracted works (Quarter 3/2018)
2. Support municipality in identification of potential International Donor for the programme of tourist development

Next Steps: Municipality

1. Draft ToR for the project design for cycle and footpaths to canyon and within canyon (Q3/2018)
2. Prepare a promotion plan for tourist services
3. Identify zones or locations for potential "inward investment" opportunities

Draft Logical Framework of the Tsalka Project

	Results chain	Indicators	Baseline (incl. reference year)	Current value Reference date	Targets (incl. reference year)	Sources and means of verification	Assumptions
Overall objective: Impact	Increased economic activity Increased tourism activity in both numbers of tourists and the related economy Increased employment in both direct tourist activities and related supplementary tourist "offers"	% increase in tourist numbers % increase in % increase in tourist related jobs	Based on initial statistical data, OR new Baseline study	TBA	Specific % increase by DATE	To be drawn from the partner's strategy.	Third party investors improve access to Hotels and other accommodation Third party investors create options for food and refreshment Investors employ local people
Specific objective(s): Outcome(s)	Oc 1: Environmental Impact Assessment completed	OC 1: EIA available and approved by Municipal council	Oc 1: NA	Oc 1: NA	Oc 1: Approved draft EIA	Oc 1: Available EIA	Oc 1: Local company with necessary experience and skills available.
	Oc 2: Cycle routes project design based on EIA completed	Oc 2: Project design completed according to recommendations in EIA	Oc 2: NA	Oc 2: NA	Oc 2: Approved Project design	Oc 2: Municipal Council approved project	Oc 2: None
	Oc 3: Cycle routes completed and accessible	Oc 3: Route(s) completed and accessible	Oc 3: NA	Oc 3: NA	Oc 3: Mountain routes accessible	Oc 3: Site location of Mountain routes	Oc 3: None
Outputs	Op 1. (related to Oc 1):	Op 1: EIA Report	NA	NA	Op 1: Report	Op 1: EIA Report approved by	

	Environmental Impact Assessment report delivered to the Municipality Op 2 (related to Oc 2) Project design delivered to the municipality and approved by Municipal Council for implementation Op 3 (related to Oc 3) Cycle route(s) completed and open to the public	 Op 2: Project design Op 3: Cycle routes open				Municipal council Op 2: Project design approved by Municipal council for implementation Op 3: Routes accessible by tourists	

Activities	*Key Activities* A 1.1: ToR for EIA report completed A 1.2: Tender completed A 1.3: Contractors complete and submit EIA Report A 1.4: EIA Report approved by Municipal Council A 2.1: ToR for Project design completed A 2.2: Tendering process completed A 2.3: Contractor approved and selected A 2.4: Project design submitted A 2.5: Project design approved by Municipal council A 3.1: ToR for project construction completed A 3.2: Tendering process completed A 3.3: Project implementation company contracted A 3.4: Specific cycle routes identified and basic preparation completed A 3.5: Routes finalised A 3.6: Hand-over to the Municipality A 3.7: Promotion and "Official" opening of routes completed	***Means:*** *What are the means required to implement these activities, e. g. staff, equipment, training, studies, supplies, operational facilities, etc.* ***Costs*** *What are the action costs? How are they classified? (Breakdown in the Budget for* the Action)	Contractor with appropriate experience is available *Pre-Conditions:* Necessary licences available Land for routes approved for the activity

2.6.4 Kaspi Municipality

Case Study: Wastewater Treatment Plants

General Information

Kaspi municipality is located in the eastern part of Georgia, within of Shida Kartli Region. Its territory consists mostly of a plain-hilly, low mountain and medium highlands. An important part of the municipality is located on the plains of Shida Kartli, which is bordered to the north with south part of main ridge of Caucasus and Triatleti ridge- to the south. Nearly all of the area is covered by the Mtkvari River flat territory, the Kvernaki ridge is located to the north and it is divided into Lekhura and Ksani ravines.

There are 17 administrative units: one city (Kaspi), and 74 villages, the municipality in total covers an area of 803.16 km^2, and according to the 2014 census, there are 43,771 inhabitants, out of which in the City – 13,423 and in the villages – 30,348.

In the region there are different type of land, such as: arable area – 12,500 ha; perennial plants – 9,500 ha; mowing area - 340 ha; pastures – 16,630 ha, and forest resources -26,317 ha (Deciduous and coniferous).

Kaspi is located at 56 km from Tbilisi and 24 km from Gori. From East to West, the municipality is crossed by main road (Autobahn) and railway line, with 4 railway stations. The bordering municipalities: Kaspi municipality is bordered to the east by Mtskheta, to the west - by Gori, to the south -by Tetritskaro and Tsalka, and to the north east – by Dusheti and Akhalgori municipalities.

Climatic conditions of the municipality - humid subtropical climate. It is used to be moderately cold winters and dry hot summers. The West and East winds are prevailing. The average annual temperature is about 11.40 C^0, maximum is - 38 C^0 and minimum -5 C^0. Wind energy resource is 1,000 kw - 1 h/2 km. The amount of precipitation is 500 - 600 mm per year, with maximum per month of 90 -100 mm, and minimum per month of 50 – 60 mm.

In the region there are big rivers, like: Mtkvari, Lekhura, Ksani, Tadzami, Kavtura, and also small rivers, like: Botisistskali, Gostibeskali, Lagjiankhevi, Nostruti, Salomia water, Shavkala, Khezhmela, Tortla, Kochakura, Mravalstkaro.

Several industrial units are active, such as, for: Ceramic brick production, Cement production, Zeolite extraction, Electric apparatus and equipment production, Production of plastic pipes, Plastic household inventory production, Biological fertilizer production, Enterprise of fruit and dried fruits, Alcohol factory
Regarding agriculture – cultivation and production of: Grapes and wine, new species of apple, raspberry, cabbage, beans, onion, wheat, barely and soybeans, cattle breeding and meat producing, pig-farming, sheep-breeding, poultry, production of honey and honey products, and fish farms.

It is important to mention that:

- There are 29 public schools and one private school, 26 kindergarten, Pupil -Youth House, a modern high standard sport complex in Kapsi municipality.
- there is a sport school - football, basketball, wrestling karate teams were created that have high success in Georgia and at international level.
- There are 12 folklore ensembles. Boys' choir "Mouravi" and Folk ensemble "Kartli" "Puppet Theatre", Folk Instruments Ensemble "Tkhoti" and modern dancing studio.
- There are business and technologies retraining center and a farm service center in the municipality. It is planned to build a professional center, which will train personnel of various professions.

Main problems identified:

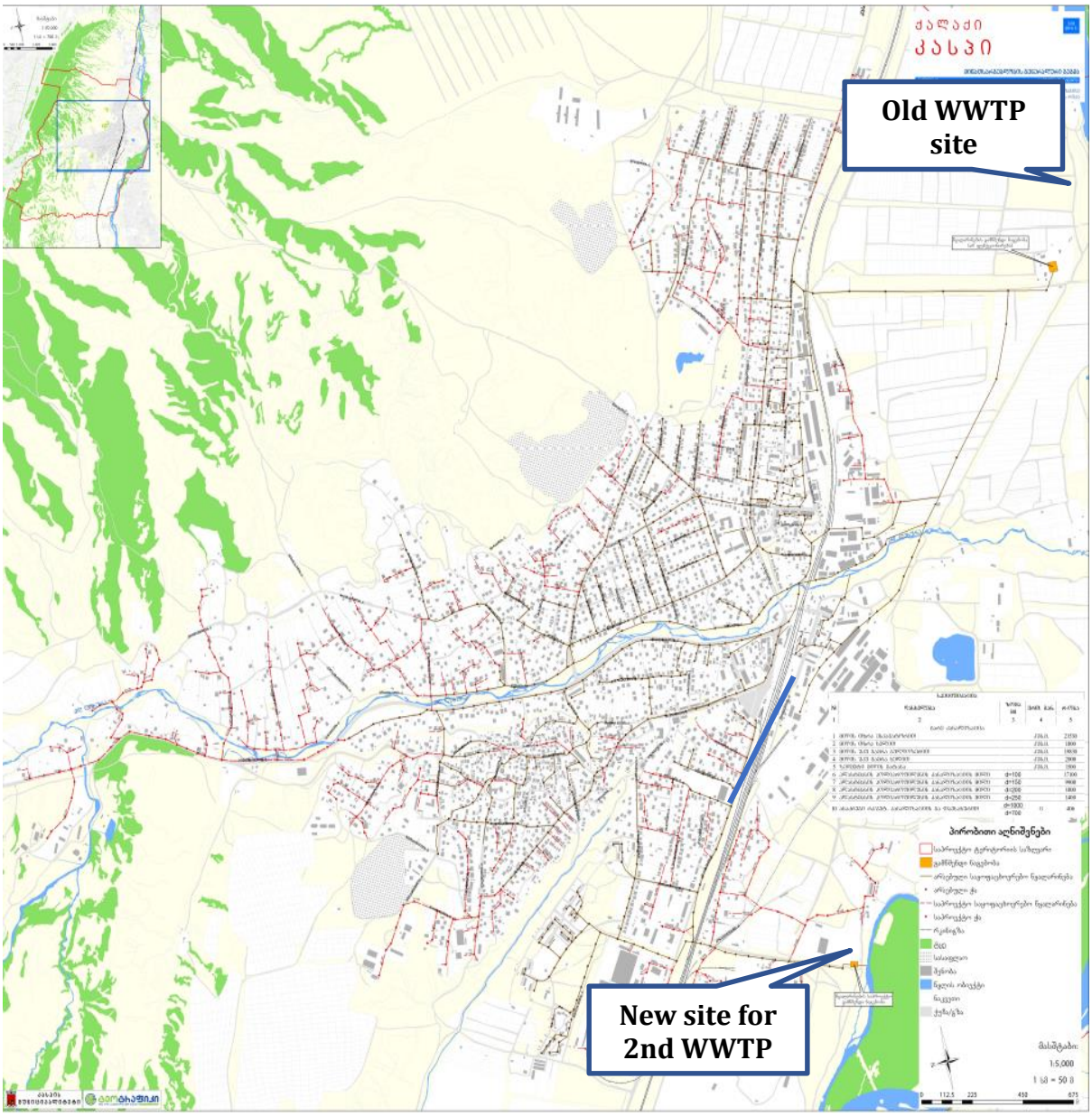
- No treatment of wastewater. Sewage is going directly to the river causing damage to the environment and especially to the resources of drinking water.
- Provision of water is not constant. On the other hand, a lot of water is wasted due to improper behaviours of inhabitants (people do not turn taps)
- Low level of tariffs not ensuring cost recovery.
- Much of water is wasted (or probably stolen as well). No precise data about water losses are available.

The intention of the Municipality is to build two plants:

1) One in the old site (WWTP1), and
2) the other one (WWTP2) in the south-west part of the city, close to the river Mtkvari.

Both sites have been marked on the Map. In both sites the land belongs to the Municipality and it seems that plots are big enough to locate a WWTP. In the neighbouring areas there are no buildings in use at the moment. Both sites are well located: away from residential districts, by the river and not far from the industrial zone and the largest sewage producers.

The Location



There is about 3.5 km between sites and the WWTP1 is higher in elevation than WWTP2 (509 vs 518,24 - 9 m of difference). It seems that there is an easy possibility to direct all

wastewater (sewage) to one site only (WWTP1), but a connection in the network is necessary (blue line on the Map). There is also necessary to check legal (ownership of land) and technical possibilities (pipe diameters).

It is estimated that WWTP1 will have approx. 4,000 households connected and WWTP2 approximately 1,000 households. Approx. 300 households have their own water well but provide sewage to the system. There are about 250 business entities in the city, some of them relatively large with the most well-known cement factory (Heidelberg Cement Factory of Kaspi).

Existing water and wastewater systems

A. Water Supply System

Kaspi is provided with water from four various water headworks: Samtavisi, Mrgvali Chala, Lekhura, Shios Tskaro, which are supplied by natural filters of river Lekhura, within horizontal gallery system.

#	Name of headwork	Water amount (thousand m^3)	Name of zones	Length of distribution network according zones (km)
1	Samtavisi	2048,544	#1	18,1
2	Mrgvali Chala	473,040	#4	2,485
3	Lekhura	529,480	#2	12,648
4	Shios Tskaro	1000,008	#3	17,067

The total length of the potable water network is 40 - 46 km.
The water distribution network is divided into zones, there are four pressure zones.
Water consumption is of 600 - 700 l/capita/day.

B. Wastewater systems

The wastewater system is fully gravitational. There was a pumping station in 1980s, but it didn't work properly for some reasons.

The total length of the sewage network is 26 km, with 21.8 km in Kaspi main city.
The city is divided by the river Lekhura. The collectors are arranged on two sides of the river (on the left and right banks). The difference in levels of collectors is of 9 meter.

The projects for rehabilitation of the sewerage network were implemented by Kapsi municipality in 2013 - 2017. The part of the networks was delivered to United Water Supply Company of Kaspi service center. Only that networks are delivered to the company that were constructed in 2013 - 2014. The Municipality plans to completely rehabilitate the sewage system in 2018 - 2019.

The city has a separate system for rain water. However, some infiltrations of rain water should be predicted.

C. Wastewater Treatment

In the past there was a mechanical WWTP built in 1978. The Map above presents the site in the south-east part of the city close to Mtkvari River. There was a plan to extend the Plant and build a biological part in 2000, but because of difficult overall economic situation (a collapse of the economy) this plan was not implemented. At the moment, no WWTP operates and sewage is directly discharged into the river.

STAKEHOLDER MATRIX

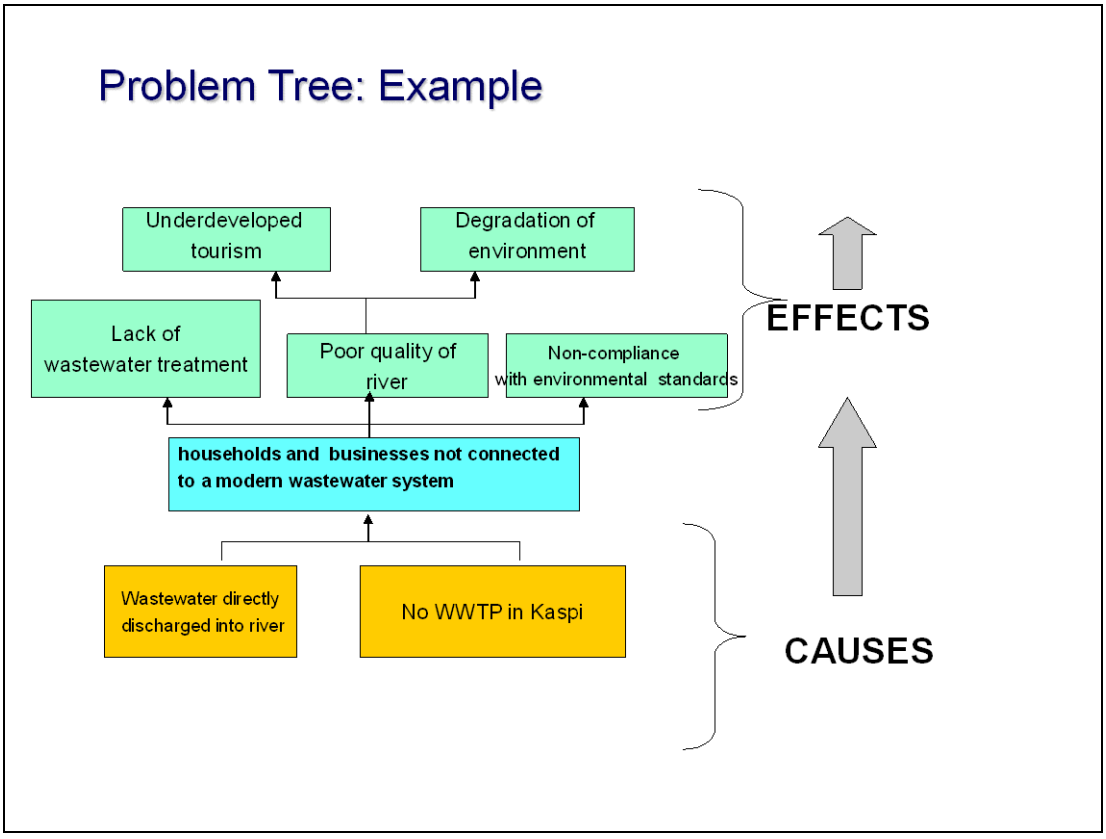
Stakeholder	(Possible) Interests and concerns
Municipality of Kaspi	• Continuity of services • Source of finance • Support socio-economic development of the area
City population	• Good water supply services • Good wastewater services • Affordable tariffs • Smooth relations • Responsive water company (prompt and correct actions when requested, required) • Clean environment
Business sector (existing and potential new customers)	• Good water supply services • Good wastewater services • Affordable tariffs • Smooth relations • Responsive water company (prompt and correct actions when requested, required)
Water Operator (UWSCG)	• More customers • Increase in turnover • Better tariff structure
Ministry of Environment	• Compliance with environmental standards • Improved quality of the water body
Ministry of Public Health	• Public health aspects
Contractor construction works	• Attractive customer • Good price and payment • Smooth procurement procedure • Good reputation (the contractor's reputation is often attached to it) • Visibility of their contribution (e.g. signboards)
Suppliers	• Attractive customer • Good price and payment for goods and services • Smooth procurement procedure • Transparency, access, fair competition.

Simplified Problem Tree

Once the potential issues had been identified they were reviewed to see how these different issues were inter-related, and a form of graphic, or "tree" was elaborated which showed the connections. The exercise is useful in determining the scope of the Impact a successful project should deliver and to see whether there are factors that need to be additionally implemented which will be outside of the project control.

The additional benefit is in identifying the added value the project provides, and to make a preliminary assessment of what will be the changes envisaged by the project and whom will be responsible for sustaining these after project closure and hand-over has taken place.

Following this analysis, there appears to be a range of reasons for why such an investment would prove to be an advantage to the city if both WWTPs can be constructed.



Conclusions

The purpose of undertaking this approach is to ensure that as the project concept is being developed, the designers are fully aware of ALL the potential issues and problems that will be addressed by the project once it begins its implementation and enables the drafting team to identify what the Terms of Reference should contain.

Next Steps:

1) Support drafting of Terms of Reference - Subject of analysis:
    - Description of current state and main problems and shortages of the system in place
    - Demand analysis including demographic analysis and prognosis, water production and utilisation, waste water production
    - Technical and technological analysis – capacity of the WWTP (or WWTPs), most suitable technology
    - Option analysis – comparing options of building 2 WWTP vs 1 WWTP in the location of the previous one. In this second case there is a need of network development between two sites and maybe development of a pumping station.
    - Financial analysis of the project including capital costs, sources of financing, operating costs (including depreciation), operating revenues, working capital and calculation of financial indicators (NPV, IRR)
    - Organisational and legal analysis to determine the best way of project development, implementation and operation.
2) Publication of tender (Municipality)
3) Support evaluation of tender offers

Old Wastewater treatment plant (site No 1)

Wastewater treatment plant (site No 2)

Case Study: Kaspi New Waste Water Treatment Plant (WWTP)

Part 2

By now, for the project, two important project tools have been developed, which are the Stakeholder Matrix and the Problem Tree, as a properly planned project addresses the needs of multiple stakeholders or constituencies with the delineation of the key problems that exist in a given context. The Problem Tree summarized project problems in hierarchical order, establishing "cause and effect" relationships between them.

The next project tool which is developed for the case-study is the Logical Framework, displayed in the form of a summary matrix. It encompasses a set of interlocking concepts, which must be used together in a dynamic fashion to develop a relevant, effective, efficient, implementable and sustainable project.

The Logical Framework builds on the Problem Tree transferred into the Objective Tree, by incorporating the different levels of objectives.

The Logical Framework indicates:

(1) how to verify whether the stated objectives have been achieved,

(2) where to find sources of information for measuring the achievement of the objectives, and

(3) the key assumptions outside the project's control that are hypothesized to be integral to project success at every level of the project's objectives.

The following tool are under preparation for the case-study:

- ***Annex 1*** - Project design and monitoring framework and assessment
- ***Annex 2*** - Project costs, financing, and achievements
- ***Annex 3*** - Rating Matrix of Core Evaluation Criteria

Another important document is the Project Concept Note, which presents all relevant information about a project idea in one place (***Annex 4***).

Next Steps: PCM Project Team

3. Support municipality in development of the ToR for the WWTP (Quarter 4/2018)
4. Support municipality in identification of potential International Donor for the design and construction of the WWTP(s) in Kaspi

Next Steps: Municipality

- Draft ToR for the project design and construction of the WWTP(s) in Kaspi (Quarter 3/2018)
- Identify additional financing sources, national or international, for the and construction of the WWTP(s) in Kaspi

Annex 1

PROJECT DESIGN AND MONITORING FRAMEWORK AND ASSESSMENT RESULTS AT PROJECT COMPLETION AND PERFORMANCE EVALUATION

Design Summary	Monitoring Mechanisms	Assumptions and Risks	Performance Indicators and Targets		
			Appraisal	Reported in the Project Completion Report	Independent Evaluation Mission Assessment Remarks
A. Sector Goal					
Improve urban environmental conditions in Kaspi	Environmental monitoring data	The Mtkvari River Pollution Prevention and Control Plan is implemented by upstream governments.	Elimination of pollution threat to raw water supply, implementation of comprehensive wastewater management strategy	Capacity of XXX m^3 per year for clean raw water supply by the Mtkvari River, XXX million t of wastewater treatment capacity, 1 (2) completed wastewater treatment plant(s)	XXX t per day wastewater treatment capacity was available, provided by 1 or 2 completed large and small wastewater treatment plants in Kaspi
Improve public health in Kaspi	Socioeconomic surveys, public health statistics	Water-quality improvements are effective.	Reduced incidence of waterborne diseases by 2020, no incidence of disease attributable to poor drinking water quality	Raw water remained good quality in accordance with national standards;	Other than total nitrogen, all other water quality parameters in the Mtkvari River have been better than class III standards for water supply.
Promote improved urban environment and amenities for business, tourism, and recreation	Socioeconomic surveys, visual surveys	Public awareness and education programs are implemented successfully.	Increase in public satisfaction with urban environment	Public satisfaction with urban environment increased	A socioeconomic survey to be conducted for measuring urban resident's satisfaction regarding drinking water quality, water pollution, surrounding environment or being affected by the dust, noise, odor, or land erosion caused by the project construction and operation.
Achieve institutional development of utilities	Audited financial statements	Political support exists for reform process.	Self-sustaining management, operation, and financing by 2022	UWSCG Reports	UWSCG improved self-sustaining management, operation, and maintenance by December 2022.

Design Summary	Monitoring Mechanisms	Assumptions and Risks	Performance Indicators and Targets		
			Appraisal	Reported in the Project Completion Report	Independent Evaluation Mission Assessment Remarks
					Municipality transferred assets to UWSCG for the WWTP(s)
B. Project Objectives					
Provide reliable, high-quality raw water supply and wastewater services to meet Kaspi area demand at affordable prices	Project completion report, water quality monitoring program	Input water of quality is maintained.	Raw water quality improved	Achieved improved class	Other than total nitrogen, all other water quality parameters of Mtkvari River Reservoir water have been better, suitable for water supply.
	Flow measurement	An adequate source of water volume exists.	Reliable yield of 1 XXX m^3 per year (75% guarantee) by January 2022	Achieved by 2022	Supply necessary water quantity
	Project and tariff reviews	Adequate political support for tariff reform process occurs.	Average raw water cost to customers not less than XXX GEL per m^3 for water consumed and YYY per m^3 for recycled water by January 2022 (constant 2022 prices)	XXX GEL per m^3 for raw water and YYY GEL per m^3 for recycled water by 2022	The raw water tariff was increased from …. The recycled water tariff was increased …..
	UWSCG management information system and report	The demand estimate for sewage flows is correct. Sewerage networks are completed	95% of urban wastewater in Kaspi area is collected by January 2022	50%–60% by the end of 2020, 100% by 2022	By June 2022, 100% is expected to be achieved when the sewers are completed.

Design Summary	Monitoring Mechanisms	Assumptions and Risks	Performance Indicators and Targets		
			Appraisal	Reported in the Project Completion Report	Independent Evaluation Mission Assessment Remarks
Reduce pollution in Kaspi city	Water quality monitoring program	Improved water quality management by UWSCG is effective and sustained. Upstream pollution prevention and control are adequately addressed.	100% of water bodies meeting target by December 2020	100% of water in the Mtkvari River Reservoir met target by December 2020	Other than total nitrogen, all other water quality parameters of the Mtkvari River Reservoir water have been better than class III, suitable for water supply. As of 2020, more than XXX wastewater treatment plants operate, upstream of the Mtkvari River Reservoir.
	Number of prosecutions		Incidents of illegal effluent use reduced	No incidents occurred	None reported.
	Socioeconomic survey, visual perception survey	Public awareness and education programs are implemented successfully.	Increase in public perception of satisfaction with the urban environment by 2020	Public satisfaction with the urban environment was increased by 202	A socioeconomic survey to be conducted for measuring urban resident's satisfaction regarding drinking water quality, water pollution, surrounding environment or being affected by the dust, noise, odor, or land erosion caused by the project construction and operation.

Design Summary	Monitoring Mechanisms	Assumptions and Risks	Performance Indicators and Targets		
			Appraisal	Reported in the Project Completion Report	Independent Evaluation Mission Assessment Remarks
	Flow monitoring, including waterworks	Continued unauthorized use is addressed.	XXX m^3 per year of raw water supply protected from pollution and water losses by December 2022	XXX m^3 averagely supplied from 2020–2022, attributing to reduced water consumption	The required annual supply has been YYY m^3 per year since 2015.
	Records of operational use		Reduction in water losses from 4% to 2% by December 2020	Reduction in water losses to 1% by December 2018	Other than the unavoidable evaporation loss in the reservoir, water loss in the culvert is less than 0.3%, while that in the open channel is less than 0.6% as estimated by TML.
C. Outputs					
Component A	Project implementation plan and reviews	The source water volume is adequate.	The Kaspi wastewater treatment plant completed with capacity of XXX m^3 per day added by December 2022	Wastewater treatment plant construction with capacity of XXX m^3 per day completed by the end of 2022	The plant stopped operating since 2000
		Input water quality is maintained.	Sewerage collection and conveyance capacity of XXX m^3 per day by December 2021	In total, XXX km of sewers were completed under the project.	XXX km of sewers (and YYY km of effluent outfall) completed.
	Discharge monitoring program, sludge disposal monitoring program	Industries implement adequate pretreatment.	Effective operating regime introduced:	Efficiency was compromised due to delay of sewer construction	(i) Sewer standards more stringent than the national standards have been introduced

Design Summary	Monitoring Mechanisms	Assumptions and Risks	Performance Indicators and Targets		
			Appraisal	Reported in the Project Completion Report	Independent Evaluation Mission Assessment Remarks
D. Activities					
Component A	Project progress reports				
Beneficiary participation	Review missions		Start: 2021 Completed: Ongoing Responsibility: Municipality Kaspi	Started in …..	Started in ….. Responsibility: Kaspi Municipality, UWSCG
Land acquisition and resettlement			Start: Complete: Responsibility:	Start: Completed: Responsibility:	Started: Completed: Responsibility:
Project design			Start: Completed: Responsibility:	Start: Completed: Responsibility:	Start: Complete: Responsibility:
Project construction			Start: Completed: Responsibility:	The construction started in ….	Start: Completed: Commissioning started: Responsibility:
Development of operational procedures and staff training (including monitoring and control procedures)			Start: Completed: Responsibility:	provided training for personnel on the operational procedures and system, including operational management, laboratory operations, and on-time monitoring.	In ……., Kaspi Municipality officially transferred assets to UWSCG, which provides structured training to existing and new personnel on operational procedures and system, including operational management, laboratory operations, and monitoring.
Operation and maintenance budget and staff development			Start: Complete: Responsibility:	Start: Complete: Responsibility:	UWSCG prepares annual operation and maintenance budgets, and provides structured training to existing and new personnel

Design Summary	Monitoring Mechanisms	Assumptions and Risks	Performance Indicators and Targets		
			Appraisal	Reported in the Project Completion Report	Independent Evaluation Mission Assessment Remarks
E. Inputs					
1. Consultants	Project progress reports		XXX person-months (international consultants) YYY person-months (domestic consultants)	XXX person-months (international consultants) YYY person-months (national consultants)	XXX person-months of international consultants YYY person-months of national consultants
2. Civil works		Counterpart funds and domestic co-financing are available.	$	$	$
3. Equipment and materials			$	$	$
4. Project management, design, supervision, and incremental administration		Competent consultants who perform well are selected.	$	$..., including training	$....., including training
5. Training			$		Included above
6. Land and resettlement	Country and township governments and village committees, project implementation agencies, international specialist	National regulations on resettlement are observed, and adequate funds are provided for resettlement.	$	$	$
7. Others: Physical contingency Price			Physical contingency, $; price contingency, $	Front-end fee, $.....; and interest during construction and commitment charges,	Contingencies utilized in project costs: front-end fee, $.....; and interest during construction and commitment charges, $.....

Design Summary	Monitoring Mechanisms	Assumptions and Risks	Performance Indicators and Targets		
			Appraisal	**Reported in the Project Completion Report**	**Independent Evaluation Mission Assessment Remarks**
contingency Front-end fee Interest during construction and commitment charges			front-end fee, $; and interest during construction and commitment charges, $.....	$.....	
Project Cost Kapi Municipality equity Co-financing (MDF) IFI			$ $ $ $	$ $ $ $	Total project cost: $ Kaspi Municipality equity: $ Co-financing (MDF) IFI:

Annex 2

PROJECT COSTS, FINANCING, AND ACHIEVEMENTS

	Appraisal Estimate			Actual		
Component	**Foreign Exchange**	**Local Currency**	**Total Cost**	**Foreign Exchange**	**Local Currency**	**Total Cost**
A. Wastewater Treatment						
Component (Part A)						
1. Civil Works						
2. Equipment and Materials						
3. Land						
4. Resettlement						
5. Project Management,						
Design, and Training						
Subtotal (A)						
B. Water Resources						
Protection Component (Part B)						
1. Civil Works						
2. Equipment and Materials						
3. Land						
4. Resettlement						
5. Project Management,						
Design, Supervision,						
and Training						
Subtotal (B)						
C. Contingencies						
1. Physical						
2. Price						
Subtotal ©						
D. Other Charges						
1. Front-End Fee						
2. Interest and Other						
Charges during						
Construction						
Subtotal (D)						
Total						

Annex 3

Rating Matrix of Core Evaluation Criteria

Criterion	Weight (%)	Definition	Rating Description	Rating Value
1. Relevance	20	Relevance is the consistency of a project's impact and outcome with the government's development strategy, lending strategy of the respective IFI for the country,	*Highly relevant* *Relevant* *Partly relevant* *Irrelevant*	3 2 1 0
2. Effectiveness	30	Effectiveness describes the extent to which the outcome, as specified in the design and monitoring framework, either as agreed upon at approval or as subsequently modified, has been achieved.	*Highly effective* *Effective* *Less effective* *Ineffective*	3 2 1 0
3. Efficiency	30	Efficiency describes, ex post, how economically resources have been converted to results, using the economic internal rate of return, or cost-effectiveness, of the investment or other indicators as a measure and the resilience to risk of the net benefit flows over time.	*Highly efficient* *Efficient* *Less efficient* *Inefficient*	3 2 1 0
4. Sustainability	20	Sustainability considers the likelihood that human, institutional, financial, and other resources are sufficient to maintain the outcome over its economic life.	*Most likely* *Likely* *Less likely* *Unlikely*	3 2 1 0
Overall **Assessment** (weighted average of above criteria)	*Highly Successful:* The overall weighted average is greater than or equal to 2.7. *Successful:* The overall weighted average is greater than or equal to 1.6 and less than 2.7. *Partly Successful:* The overall weighted average is greater than or equal to 0.8 and less than 1.6. *Unsuccessful:* The overall weighted average is less than 0.8.			

Annex 4

Scope of information	Level 1 Project Concept	Level 2 Project Concept	Level 3 Project Concept
A. Administrative Information			
1. Project name			
2. Economic Entity submitting the project			
3. Senior official responsible for the project within Economic Entity			
4. Subordinated entity responsible for the project and its implementation (if different from the Economic Entity)			
5. Responsible official in subordinated entity (if applicable)			
6. Project is new or on - going	Please indicate if the project is new or on-going	Please indicate if the project is new or on-going	Please indicate if the project is new or on-going
B. Project Rationale and Assessment of Need			
7. Describe the specific problem that the project is intended to address and its severity.	**Where** is the problematic situation located (district, street, area, building, etc.)? **Who** is directly affected by the problem (what group of people, citizens, etc.)? **How long** does the problem exits? What are the **results and severities**?	Indicate what causes the severities (higher demand for the services -more users in relation to the capacity of facilities, demand for new services, technical condition of the infrastructure, others)?	Indicate what causes the severities (higher demand for the services -more users in relation to the capacity of facilities, demand for new services, technical condition of the infrastructure, others)?
8. Explain how the project will alleviate this problem.	What we propose to do to solve the problem? Why we propose the described solution (how the solution is going to help in reducing of identified severities)?	<u>Additionally to the previous level:</u> Information about the possible **alternative solutions** that may solve the problem. Recommendation of the alterative which should be analyzed in more detailed.	<u>The same information about the previous level:</u> Information about the possible **alternative solutions** that may solve the problem. Recommendation of the alterative which should be analyzed in more detailed.

9. Identify the specific target group intended to benefit from the project.	Who will directly benefit from the project (what group of inhabitants)?	Additional information about other beneficiaries (e.g. number of inhabitants) including indirect beneficiaries.	Additional information about other beneficiaries (e.g. number of inhabitants) including indirect beneficiaries.
10. Indicate approximately how many end-users there will be for the services provided by the project. Specify the unit of measurement (e.g., individuals, households, businesses).			Calculate the possible number of users of the infrastructure (in division into existing users and new users) or predicted number of services which will be delivered, etc
11. Consequences of rejecting the project	What will be costs if we reject the project implementation (e.g. costs of necessary repairs)? This information may be given in a descriptive way.	What will be costs if we reject the project implementation (e.g. costs of necessary repairs)? This information may be given in a descriptive way.	What will be the costs if we reject the project implementation (e.g. costs of necessary repairs)? This information should be given in a quantitively way.
12. Scope of work	Describe the predicted scope of work in the project (activities planned to be done).	Describe the predicted scope of work in the project including if necessary: 1. Project preparation (conceptual design, construction design, additional analysis and studies 2. Acquisition of land (if necessary) 3. Construction works 4. Purchase of equipment	<u>Additionally, to the previous level:</u> Specify the approximate physical capacity of the proposed facilities, indicating the unit(s) of measurement e.g., cubic meters of water per day, vehicles per day, clients per day, square meters of useable space, etc.).
13. Connections with other investments	Indicate connections with other investments planned to be implemented.	Indicate connections with other investments planned to be implemented.	<u>Additionally, to the previous level:</u> Indicate other investments which would be necessary to be implemented regarding the project objectives.
C. Benefits from the project implementation			
14. Benefits from the project implementation of different types: - social (health, quality of life, poverty, safety, etc.) - economical (labour market, economic development, property market, tourism, etc.)	Identify main benefits of the project implementation.	Identify benefits and costs for direct users and other benefits and costs related to the project, including intangible benefits and costs.	<u>Additionally to the previous level:</u> Identify the important positive and negative project impacts that will be difficult to value.

- cultural heritage			
15. Environmental impacts - air emissions, - energy use, - water use, - wastes, etc.	Identify main environmental impacts of the project implementation.	Identify main environmental impacts of the project implementation.	Describe main environmental impacts of the project implementation.
D. Compliance of the Project with the Strategic goals			
16. Describe how the project contribute to the strategic goals implementation	Indicate relevant strategic goals and operational programs, if the project contributes to its implementation.	Indicate relevant strategic goals and operational programs, if the project contributes to its implementation.	Describe how the project contributes to the relevant strategic goals and/or operational programs implementation.
17. Is the project in compliance with the priorities for the next years	Indicate relevant program in the budget	Indicate relevant program in the budget	Indicate relevant program in the budget

E. Affordability			
18. Budgetary impact	Indicate if the project is expected to bring reliefs or additional burdens to the budget.	Describe the projected budgetary impact of the project during operation phase (predicted budget burdens/profits and/or reliefs) for example: - Costs related to the maintenance of new infrastructure (which is new in the budget) - Potential revenues - fees related to the services - Potential costs of subsidizing of municipal companies if they are responsible for the maintenance of infrastructure	Describe and estimate the projected budgetary impact of the project during operation phase (predicted budget burdens/profits and/or reliefs) for example: - Costs related to the maintenance of new infrastructure (which is new in the budget) - Potential revenues - fees related to the services - Potential costs of subsidizing of municipal companies if they are responsible for the maintenance of infrastructure

19. Additional, external, sources of financing of the project	Identify any other potential sources of funding apart from the budget and their expected contributions.	<u>Additionally, to the previous level:</u> Describe any further actions or decisions that will be required to secure additional funding and explain the expected timeframe.	<u>Additionally, to the previous level:</u> Asses what is the probability of obtaining the assumed sources of financing according to the below scale: Assumption – we know there is a possibility to apply for funds provided that we fulfil certain requirements Application – the application was made and is under the evaluation Promise –funds are granted for the project Agreement – the funds are guaranteed by the bilateral agreement.
F. Sustainability Issues			
20. Operation and maintenance		Specify the organization which will own and operate the assets and facilities created / renovated by the project.	Specify the organization which will own and operate the assets and facilities created / renovated by the project.
21. Additional consultations required			
G. Project costs			
22. Costs of project implementation	Provide estimation of the total cost of the project in current prices. Give the basis for these cost estimates.	Provide estimation of the total cost of the project in current prices in the following division: 1. Project preparation (conceptual design, construction design, additional analysis and studies 2. Acquisition of land (if necessary) 3. Construction works 4. Purchase of equipment Give the basis for these cost estimates.	Provide real and financial schedule (according to the below table - table 1).

Case Study : Gori

Part 3

Applying PCM approach: Developing a Project Concept

In every municipality there will be occasions when some project ideas will require additional funding outside those available from the Municipal budget. On such occasions the municipality should prepare a more complete project idea in order to submit this to the appropriate agency. This may be the Regional Development Fund, or the MDF, or an external (International) donor.

A carefully drafted project concept becomes increasing important when attempting to access International funds and the use of the PCM approach and techniques can improve the overall quality of a project idea.

Background

Gori is located in eastern Georgia in the region of Shida Kartli and has a current population of approximately 50,000 (2015) down from a high of 69,000 in 1989 although it has started to increase again in recent years. The city economy is derived from a variety of sectors, but relies on agriculture, tourism, and SME and service sector for its main employment. Many residents commute to the capital, Tbilisi, which lies approximately 90 km to the west, a journey of about 45 minutes.

It is well known as the birthplace of Joseph Stalin, but also boasts as the birthplace of the philosopher, Merab Mamardashvili and a number of other historic figures. It also has many other historical connections and sites, including a castle built in the 17th century and the 18th century church of Gorijvari and the rock-hewn town of Uplistsikhe and the even older 7th century Ateni Sioni church which are close by and within easy travel distance for tourists.

At the level of the entire municipality (including the city of Gori) local economic activity is based around agriculture (production of fruit, vegetables, cereals, animal husbandry). Other important sectors of economy are general trade, transportation, construction and tourism. After meetings with the representatives of Gori Municipality there is a desire to improve the potential for tourism as well as to open up the entire conurbation to residential and commercial growth.

The project refers to the construction of a new bridge over the River Liakhvi, connecting both parts of the city by a second bridge to the Northern end of the Western bank, which is an under-developed area of the city. (See map below). The only other bridge was originally built in the last century and

was damaged during the conflict in 2008. It serves as the only means of traversing the river to access the residential and commercial properties on the Western bank.

Traffic intensity in Gori was high due to the direct connection with Tbilisi, although in recent years the new highway has reduced the traffic in Gori somewhat. However, major traffic flows gather at the central streets, and are most intensive at rush-hours. The necessity for all traffic heading to the Western conurbations means there is additional pressure on the bridge, and increased traffic, and the related pollution that accompanies this.

The Location

The area of the land and river section where the new bridge is intended to be located is in a state of disuse, and due to the limited access by road, the land has been used as a dumping ground for rubbish and refuse and is in need of significant renovation.

View looking over the River towards the Western bank

The residential housing blocks on the Western bank are in a state of some disrepair, and this is one of the key aspirations for the municipality to encourage both public and private investment to improve the housing situation as an impetus to profiling Gori as an attractive city for incoming population.

In addition there is an expectation that the improved access to the rest of the city would serve as an incentive for other types of investment, which would include the renovation of factory or production facilities to service the city and close hinterland.

Picture of old factories/plants

The likely position of the new bridge from the Eastern shore of Gori city.

The proposal for the new bridge has been a topic for development by the municipality for a number of years. The slow increase in population and the depressed economy have proved to be a catalyst for taking the idea to the next stage of analysis and assess how and to what extent the bridge can facilitate social and economic development.

In order to ensure that all the related issues for which the bridge would be an appropriate solution were understood, a short Stakeholder analysis was undertaken. The results of this analysis are tabulated below the map on the following page.

Old Bridge

Stakeholder Needs Analysis Matrix

In order to ensure that the project does meet the needs of the population it is useful to undertake a Stakeholder Needs Analysis, particularly if there has not been an opportunity to meet specific interested groups previously. The following example of the SHA focuses on the difficulties experienced by different Stakeholders due to the bridge shortcomings.

Stakeholder	Problems
Business sector	Reduced numbers of customers Delays in getting product delivered Regular traffic jams in city centre Business opportunities reduced Farmers have trouble getting produce to markets
Tourists	Insufficient accommodation Few alternative touristic activities
City population	Population levels high Difficulty in accessing Western areas Problems in accessing city centre from the West bank Slow moving traffic Length of time to access different parts of city
Ministry of Environment	High levels of pollution due to traffic emissions
Ministry of Economy	Low levels of economic activity
Municipality of Gori	Tourism potential restricted Western bank underdeveloped

Once the potential issues had been identified they were reviewed to see how these different issues were inter-related, and a form of graphic, or "tree" was elaborated which showed the connections. These connections are illustrated below. The exercise is useful in determining the scope of the Impact a successful project should deliver and to see whether there are factors that need to be additionally implemented which will be outside of the project control.

The additional benefit is in identifying the added value the project provides, and to make a preliminary assessment of what will be the changes envisaged by the project and whom will be responsible for sustaining these after project closure and hand-over has taken place. (See Problem Tree in Annex to this example)

However, no matter how well researched the initial project is, external factors can occur that may have an impact on the Activities, or Outcomes of the project being developed. In such a case it is important that the project designers are aware of changing circumstances and adapt their own project design to address and take account of the new evolving situation.

Such an occasion can occur at any time and influences how a project responds through either a new design, a packaging of smaller projects into a larger more effective one, or through a revision to the project scheduling.

The situation in Gori evolved and such a situation required the project team to revisit the existing project and see how the new situation impacts on the current identification and formulation phase of the PCM cycle.

The changes were significant. A new city development project was approved for implementation and funding was arranged. The work involved the construction of several tourist related buildings and venues and the construction of a cycle track from the Castle to the outlying city suburbs.

The implementation of this project does not directly address the problems identified with the previous analysis, and in fact if it has the expected impact of increasing tourist activities and volumes, it may well increase some of the pressure on the existing infrastructure provision, thus adding more weight to the original Bridge Project concept.

There are two ways of dealing with this change the first is described below as "Project Packaging" whereby the projects are brought together and regarded as one larger project, or as project components. However, as the City development project is already approved for funding, a change now would be difficult to arrange.

The second way of dealing with this issue is to draft a separate project based on the anticipated outcomes of the City Development project and building on the expected impact and re-evaluated situation. (PCM is a cyclical approach and as changes take place, it is necessary to revisit the original analysis and deal with any changes that have taken place). This is presented below.

Packaging Project

The idea of 'packaging' projects is a feature of the PCM process, and in particular following the identification of potential Objectives in the form of an objective "tree", which is a diagram presenting the "means/ends" relationship of the many objectives identified following the situational analysis.

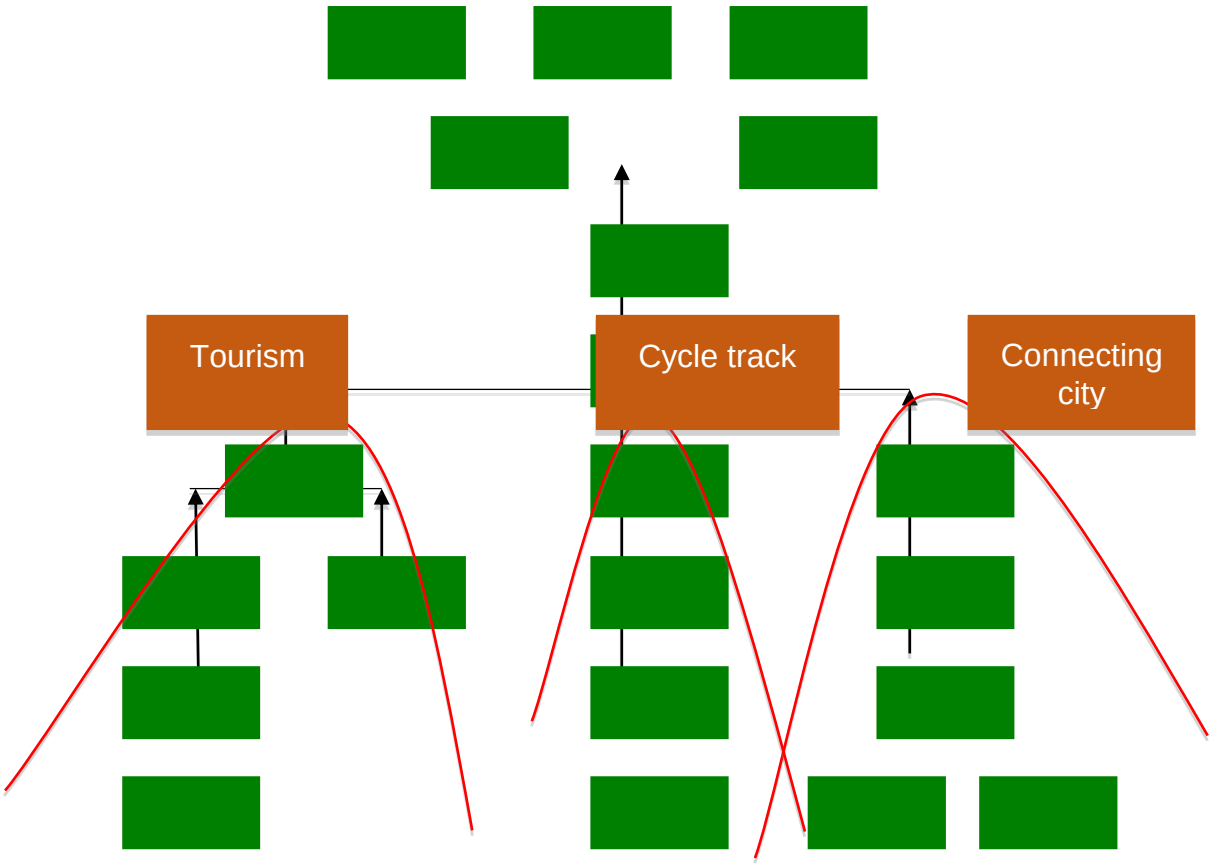
This is referred to as the "scoping" stage in project identification. And represents the assessment of what is a practical and realistic possible project from among the many potential ones identified.

In the case of Gori, the identification of potential developments presented a number of small projects, which naturally fit together into a larger one with more impact and for which donor support was sought. (It is a recurring possibility that donors may find a larger project with greater potential impact more attractive, despite the additional financial requirements).

As an example of the idea of scoping, the "Objective Tree" presented below is for illustration purposes only. Each "box" represents a potential project objective (its exact nature being dependant on which Objective will become the Outcome, for the selected project. Any one of the grouped objectives *could* be a project in its own right, but the higher up the "tree" the project is selected, the greater the impact, but the much larger the commitment in time, people, resources and corresponding budget.

Similarly, should a project be chosen nearer the bottom of the tree, the maximum impact of the project will only come about if a number of ADDITIONAL projects are implemented by someone else, or at a future time.

[*It should be noted that the "titles" of each of the scoped objective branches is for convenience and not prescriptive.]*



Draft Project Concept Note

Following discussions with the team in Gori, an outline of a PCN for the presentation of the project to MDF for consideration and support was prepared.

Information Requirement	Response
Administrative Information	
Project name	Gori New Bridge
Economic Entity submitting the project	Gori
Senior official responsible for the project within Economic Entity	Named Officer
Subordinated entity responsible for project and its	As 2. Or new name as required

implementation (if different from the Economic Entity)	
Responsible official in subordinated entity (if applicable)	As 3. Or new name as required
Projection Rationale and Assessment of Need	
Intervention Logic	
6. Describe the specific problem that the project is intended to address and its severity.	Traffic intensity in Gori is high due to the direct connection with Tbilisi, although in recent years the new highway has reduced the traffic in Gori somewhat. However, major traffic flows gather at the central streets, and are most intensive at rush-hours. The necessity for all traffic heading to the Western conurbations means there is additional pressure on the bridge, and increased traffic, and the related pollution that accompanies this. In addition, the inconvenience of negotiating through the centre of Gori before being able to travel to the part of the city on the Western bank of the river is diminishing potential development in that sector, for both private and public development. Commercial enterprises are deterred from investing, thus dampening down investment and reducing employment possibilities in the city. There is also a deterioration of private and public buildings, which need renovating and new residential property needs building.
7. Explain how the project will alleviate this problem.	The main benefits from the implementation of this project will be the improvement of the traffic situation and living conditions of local population. It will also have the following tangible and intangible benefits: **A. Tangible** Increased traffic flow Reduction in pollution in centre of Gori city Reduced volume of traffic utilising old bridge **B. Intangible** Improved social connections between both sides of the river. Greater Encouragement of new developments, both for residential and commercial buildings

8. Summarise the rationale for government intervention by identifying the market failure and/or distributional/equity concerns the project is intended to address.	The objectives of the project are to 'join' the two sides of the City with a second bridge so as to improve living conditions in the Western suburb, reduce heavy traffic on the older bridge and thus reduce the impact of pollution and traffic congestion in the city centre. This project is not one that should be carried out by the private sector as it is a civil responsibility of the administration to ensure good infrastructure, improved healthy environment, and economic development.
9. List the alternative ways of addressing the problem which have been considered, including any policy measures not involving capital expenditure.	The following options have been considered: ***Option 1*:** Further repairs to existing bridge and some additional traffic controls ***Option 2:*** Make the city centre "pedestrianism" and limit traffic flow ***Option 3***: New road for the Western bank connection to main Highway
Needs Assessment	
10. Identify the specific target group intended to benefit from the project.	Two main groups are targeted. The most important are existing and potential residents of the suburbs on the Western bank of the river Secondary groups are private investors who would be expected to consider investing in the sector consequent to the new traffic arrangements being in place
11. Indicate approximately how many end-users there will be for the services provided by the project. Specify the unit of measurement (e.g., individuals, households, businesses).	The end-users would be the XX residences, being approximately XX citizens of the City of Gori [Detailed technical information to be inserted as appropriate]
12. Provide an estimate of the physical demand for the services provided by the project on completion and a rough estimate of how fast this demand expected to grow. Specify the unit(s) of measurement (e.g., cubic metres of water per day,	The new bridge should divert XX% of traffic from the centre of the city. The new bridge could also take the potential increased volume of traffic as new apartment buildings are constructed. [Detailed technical information to be inserted as appropriate]

vehicles per day, clients per day, etc.).	
13 Specify the approximate physical capacity of the proposed facilities, indicating the unit(s) of measurement e.g., cubic metres of water per day, vehicles per day, clients per day, square metres of useable space, etc.).	The bridge would be designed to take a maximum of XX tonnes of weight at any time, being approximately XX volume of cars per day. [Detailed technical information to be inserted as appropriate]
Project Scope	
14. Describe the project and its components and explain how these represent a comprehensive solution. Wherever relevant mention the physical characteristics of the project, the location and size of the project, the type of the establishment, the current use of land, the type and altitude of the area where the project will be executed, the dimensions and capacity of the project and report the presence of any Natura 2000 areas	The main project components are 1. The commission on an Environmental study to confirm the location of the bridge is consistent with the least negative impact on the environment, and that all necessary environmental concerns are identified and adhered to. *2.* The completion of the design of the bridge meeting international standards and consistent with the anticipated usage of the bridge for traffic volumes, capacities, weight etc. *3.* Selection and implementation by an approved contractor with experience in such construction *4.* Design of a Park on the eastern bank of the river and leading to the bridge. *5.* Implementation of the Park by an approved contractor with appropriate experience of such works. *6.* Completion of all necessary connecting roads.
Strategic Case	
15. Indicate how the project will contribute to the achievement of the Government's	The municipality needs to reinvigorate the Western bank of the city for both residential and commercial use.

strategic goals and to the achievement of the goals and objectives of the Economic Entity.	Migration of people seeking employment can be addressed by encouraging the investment of new businesses, both large and small scale, on the West bank by improving the access and ease of communication between both sides of the city and the other main highways. Additional residential property is necessary as existing and future residents seek to have their own properties and there is limited space on the Eastern bank of the city to accommodate expansion of residences.

Preliminary Economic Case and Analysis of Alternatives

Project Implementation Costs

16. Indicative estimate of the total cost of the project for a period of up to 7 years in the form of table and the alternative project options (including technical options).

If the project is extended beyond the age of 7, the remaining amount will be recorded as a single amount (lump sum). Include any necessary mitigation measures for the environmental impact. Reference to the source / unit costs used in the cost estimate.

Total estimated cost is GEL xxxxxxxx (xxxxxxxxx USD equivalent) (GEL/USD exchange rate 2.3) VAT included.

Present a Table of the cost estimates to be complete on final Project design

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8+	Total
Project phase	-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	
Total Expenditure		-	-	-	-	-	-	-	

17. Provide an indicative estimate of the total estimated capital cost of the project and relevant alternatives, including technical variants, in current prices. Capital costs to include all implementation costs, up to project completion, required to deliver anticipated benefits to end-users.

The final budget will be based on standard construction approaches and methods.

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8+	Total
Project results	-	-	-	-	-	-	-	-	-
Project activity	-	-	-	-	-	-	-	-	-

If possible, include any environmental mitigation measures that are planned. Extend table as necessary for alternatives. For the completion of this table please use the excel sheet provided in Annex 3 and submit it to DG EPCD	
Project Benefits	
18. Identify the main benefits to the users of the assets that will be created by the project.	The main benefits from the implementation of the project will be the improvement of the traffic situation and living conditions of local population. The project will have the following tangible and intangible benefits: **A. Tangible** Improvement of the traffic situation, which would reduce traffic pollution and improve the flow of traffic through the city centre. **B. Intangible** Environmental improvement
19. Identify any significant externalities, i.e., benefits or costs to non-users.	None envisaged
20. Explain any significant differences in benefits between project alternatives.	Other solutions would not provide the range and number of changes envisaged by this option. Unless a new route to the Western suburbs is completed, there would still be high volumes of slow moving traffic through the city centre. There would be no significant reduction in pollution or travel time, and accessibility to the Western suburbs would not be improved.
21. Identify the main benefits and costs that it is considered feasible to value, including intangible benefits and both positive and negative externalities. Identify the important positive and negative project impacts that it will be difficult to value.	The changes in traffic volume and flow, and the capacity on the old bridge can be measured to identify the improvements made, and by implication the reduction on wear andtear on the road surface and the bridge. Increased occupancy of residential properties on the Western bank can be measured, as can new or renovated commercial enterprises. Less easily measured would be changes to the levels of pollution in the centre of Gori, and over time, measures of increased economic activity.
22. Provide an estimate of the capital	Total estimated cost is GEL 7,549,298.10 (3,431,499.14 USD equivalent) (GEL/USD exchange rate 2.3) VAT included.

cost per user or capital cost per unit of demand of the final service.	
23. Indicate how these costs compare with the costs of project alternatives and with other similar, recently completed projects.	*Provide evidence of similar projects with comparative costs* *Examples would be provided from suitable similar projects*
24. Explain why the reference project is expected to represent a worthwhile use of public resources compared to alternatives (including doing nothing).	Doing nothing would increase the pollution in the centre, increase the deterioration of the roads in the city and bring in higher long term costs. The inaccessibility of the Western suburbs is an impediment to immigration, which the city needs to increase and sustain businesses and services. By investing in this new bridge the benefits include the increased activity in new and expanded business, increased occupancy of residential building, and reinvigorating a run down commercial centre on the West bank of the river.
25. Describe the main risks and assumptions that could potentially affect the economic viability of the project. Identify any mitigation measures that are planned or explain how key risk will be managed should they occur.	A full Environmental Impact Assessment should be undertaken to ensure the suitability of the proposed site of the bridge, this may prove to be more complex and challenging than currently thought.

Affordability

26. Show the projected budgetary impact of the project both during preparation, design, implementation and operation.
Extend or contract the tabular format as necessary to capture the full construction period and two years post-construction.

Approximate estimates should be presented, based on best available information. For example a Table might be presented. Final figures will be inserted once the project design is completed

	Year 1	**Year 2**	**Year n**	**Completion year + 1**	**Completion year + 1**	**Outer year (average)**
	Construction period			Operation period		
TORs and Designs	-	-	-	-	-	-
Purchase of land	-	-	-	-	-	-
Capital outlays (See App. 3)	629.950	-	-			
Recurrent outlays (O&M) (See App. 3)						1.110.232
Revenues						

	Net budgetary impact	629.950	-	-	1.110.232	1.110.232	1.110.232
27. Identify any other sources of funding apart from the budget and their expected contributions. Describe any further actions or decisions that will be required to secure these and explain the expected timeframe.	Under the Project, 80% of the cost will be financed by a credit (50%) and grant (30%) from MDF and the remaining 20% will be a contribution by the MG, from their own budget. The provision of the MG contribution will be proportionally as per the disbursement amount. Key Stakeholders are: • Grant Recipient/ Borrower: Government of Georgia (Ministry of Finance) • Local Representation: Municipal Government (MG) • Sources of Funding: World Bank(WB) and Municipal Government (MG)/ Government of Georgia (GOG) Implementing Agency: Municipal Development Fund of Georgia (MDF).						
28. If matching funding from local government or self-financing public agencies is expected to be required, provide some evidence that adequate budgetary provision can and will be made.	N/A						
29. Identify any issues that will need to be taken into account when planning for procurement.	None envisaged. Local contractors are available and there are many years of experience with similar projects and existing local contractors.						
30. Set out any characteristic of the project that could favour PPP as a procurement option[2]	None						
31. Summarise the proposed arrangements for overseeing and/or managing project implementation.	This will be finally determined by the MDF on completion of detailed project implementation plans						

[2] The choice of procurement method-traditional infrastructure procurement or public-private partnership (PPP) – will be made at a later stage, after appraisal and on the basis of a value of money analysis as explained in Part IV of the Manual. At Pre-Selection stage, the intention is only to flag up projects characteristics that might make them suitable for PPP and no decision is implied.

32. Provide evidence that the organisation responsible for overseeing and/or managing implementation has adequate capabilities for implementing a project of the proposed scale and nature.	A Regionally/Nationally approved organization will undertake the monitoring of the implementation of the project
33. Identify any potentially critical constraints that will need to be overcome, e.g., environmental restrictions or land acquisition, or additional measures, including legislative changes, that will need to be put in place before the project can be successfully implemented. Indicate the planned steps for doing this.	None envisaged
34. Specify the organisation which will own and operate the asset created by the project.	The Municipality of Gori
35. Provide evidence that the organisation responsibility for operating and maintaining the capital asset will have adequate technical, managerial and financial capacity to do so. If this is not the case, specify what measures are planned to create the necessary	Capital asset (the bridge) will become a Municipal asset and will continue to be managed by the municipality after completion of the works. All connecting roads will be managed and maintained by the municipality

capabilities.	
36. Explain how operating, maintenance and depreciation expenses will be covered once the project is completed, including any changes to user charges or user charging policy that may be necessary.	These will be covered through the existing municipal budget which has the necessary capacity to manage the maintenance of the new bridge. This includes provision for regular and on-going maintenance as well as unforeseen events, similarly to the management of the existing bridge.
37. Describe any significant environmental impacts and proposed mitigation measures, where foreseen.	None are anticipated, although an Environmental Impact Assessment is proposed to ensure there are no unforeseen issues in this regard.
38. Describe any significant social impacts, particularly those relating to the allocation of costs and benefits between the various project stakeholders, and proposed mitigation measures, where foreseen.	No adverse social impact is assumed, as the new bridge will be on land that is currently not used by residents of the city of Gori or businesses.
39. Explain which project alternatives will be taken forward to project appraisal and which will be dropped as a result of the pre-selection analysis, including economic viability and affordability[3]	All options will be fully considered as detailed above. If the new bridge proves to be untenably expensive in comparison to the alternatives, the proposal will be reviewed to identify the minimum necessary proposal. However, the maximum benefit will only come though the full implementation of the project as foreseen.
40. List the further studies which will be required before an appraisal decision can be taken. If a pre-feasibility study is expected to be required to narrow down the short-list	EIA and a feasibility study should be conducted before agreement to the full project.

[3] Refers to project with capital cost over €5mln.

of projection for appraisal, explain why.	
41. Identify any specific issues that will have to be given special attention as part of further studies, including findings from ex past evaluation of similar projects.	None
42. Confirm whether or not a social impact assessment will be required and if it is specify the main areas of focus.	None envisaged

Case Study : Kaspi

Part 3

Draft ToR for the New WWTP in Kaspi Municipality

1 Introduction

Wastewater from households and different industries represent a significant pressure on the environment and treatment is normally required before discharge.

For treated wastewater from households (sometimes mixed with industrial wastewater in a public collecting system) to be considered acceptable it should undergo at least secondary treatment either at a public wastewater treatment plant, an independent wastewater treatment

plant or in an industrial wastewater treatment plant (where usually the industrially generated wastewater is dominating).

Industrial wastewater needs to undergo a treatment process which is to remove the specific pollutants generated by the production process to a limit which does not negatively affect the aquatic environment or human uses (in the case of direct discharges) or allows a proper treatment together with wastewater originating from household activities in a public wastewater treatment plant (indirect discharges).

This ToR was formulated in full co-operation with the beneficiary (the Municipality of Kaspi), and the following chapters detail the project design and context, this document serves as a basis for the proposal to be delivered by the tenderer according to the Tender Instructions for the project.

2 General Information

Kaspi municipality is located in the eastern part of Georgia, within of Shida Kartli Region. Its territory consists mostly of a plain-hilly, low mountain and medium highlands. An important part of the municipality is located on the plains of Shida Kartli, which is bordered to the north with south part of main ridge of Caucasus and Triatleti ridge- to the south. Nearly all of the area is covered by the Mtkvari River flat territory, the Kvernaki ridge is located to the north and it is divided into Lekhura and Ksani ravines.

There are 17 administrative units: one city (Kaspi), and 74 villages, the municipality in total covers an area of 803.16 km^2, and according to the 2014 census, there are 43,771 inhabitants, out of which in the City – 13,423 and in the villages – 30,348.

In the region there are different type of land, such as: arable area – 12,500 ha; perennial plants – 9,500 ha; mowing area - 340 ha; pastures – 16,630 ha, and forest resources -26,317 ha (Deciduous and coniferous).

Kaspi is located at 56 km from Tbilisi and 24 km from Gori. From East to West, the municipality is crossed by main road (Autobahn) and railway line, with 4 railway stations. The bordering municipalities: Kaspi municipality is bordered to the east by Mtskheta, to the west - by Gori, to the south -by Tetritskaro and Tsalka, and to the north east – by Dusheti and Akhalgori municipalities.

Climatic conditions of the municipality - humid subtropical climate. It is used to be moderately cold winters and dry hot summers. The West and East winds are prevailing. The average annual temperature is about 11.40 C^0, maximum is - 38 C^0 and minimum -5 C^0. Wind energy resource is 1,000 kw - 1 h/2 km. The amount of precipitation is 500 - 600 mm per year, with maximum per month of 90 -100 mm, and minimum per month of 50 – 60 mm.

In the region there are big rivers, like: Mtkvari, Lekhura, Ksani, Tadzami, Kavtura, and also small rivers, like: Botisistskali, Gostibeskali, Lagjiankhevi, Nostruti, Salomia water, Shavkala, Khezhmela, Tortla, Kochakura, Mravalstkaro.

Several industrial units are active, such as, for: Ceramic brick production, Cement production, Zeolite extraction, Electric apparatus and equipment production, Production of plastic pipes, Plastic household inventory production, Biological fertilizer production, Enterprise of fruit and dried fruits, Alcohol factory

Regarding agriculture – cultivation and production of: Grapes and wine, new species of apple, raspberry, cabbage, beans, onion, wheat, barely and soybeans, cattle breeding and meat producing, pig-farming, sheep-breeding, poultry, production of honey and honey products, and fish farms.

It is important to mention that:

- There are 29 public schools and one private school, 26 kindergarten, Pupil -Youth House, a modern high standard sport complex in Kapsi municipality.
- there is a sport school - football, basketball, wrestling karate teams were created that have high success in Georgia and at international level.
- There are 12 folklore ensembles. Boys' choir "Mouravi" and Folk ensemble "Kartli" "Puppet Theatre", Folk Instruments Ensemble "Tkhoti" and modern dancing studio.

- There are business and technologies retraining center and a farm service center in the municipality. It is planned to build a professional center, which will train personnel of various professions.

3 Project context and design

3.1 Overall objective

Strengthening Georgia's implementation capacity for EU environmental acquis. In particular, Council Directive 91/271/EEC of 21 May 1991 concerning urban wastewater treatment.

EU Relevance

The EC Urban Waste Water Treatment Directive (UWWTD) 91/271/EEC of 21 May 1991 is designed to reduce pollution of freshwater, estuarine and coastal waters by domestic sewage and industrial waste water - collectively known as 'urban waste water'. The Directive sets minimum standards for the collection, treatment and discharge of urban wastewater, and has deadline for implementation, according to the Georgian Parliament, in 2018.

The EU-Georgian Association Agreement (AA) (under Chapter 3 - Environment) also stipulates obligations of Georgia to ensure adequacy of Georgian regulatory base for water and wastewater management to the directives of the European Commission. The implementation period of these commitments is up to 20 years after the ratification of the AA by the all parties.

Relevant EU Acquis

- **Council Directive 91/271/EEC** of 21 May 1991 concerning urban wastewater treatment
- **Directive 2000/60/EC** of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy
- **Directive 2006/118/EC** of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration
- **Council Directive 86/278/EEC** of 12 June 1986 on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture
- **Council Directive 98/83/EC** of 3 November 1998 on the quality of water intended for human consumption
- **Council Directive 75/440/EEC** of 16 June 1975 concerning the quality required of surface water intended for the abstraction of drinking water in the Member States
- **Directive 2006/118/EC** of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration
- **Council Directive 97/11/EC** of 3 March 1997 amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment

- **Council Directive 92/43/EEC** of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora
- **Council Directive 79/409/EEC** of 2 April 1979 on the conservation of wild bird

3.2 Problem definition

- Relevant Stakeholders
  - The **Minister of Environment Protection and Agriculture of Georgia**, is the key authority at the national level dealing with water management implements governmental policy in the field of water resources management and protection, assesses plans of environmental impact mitigation in EIA reports in the field of water, establishes and adopts Maximum Admissible Discharges, conducts state inventory of water use, etc.
  - The **National Environmental Agency,** under the Ministry of Environment Protection and Agriculture of Georgia, is responsible for water quality and quantity monitoring. It also is in charge of issuing licenses for abstraction of groundwater
  - The **Ministry of Labor, Health and Social Affairs of Georgia**
  - The **Ministry of Regional Development and Infrastructure of Georgia** is responsible for implementing regional development policy including coordination and support of the development of water supply and sanitation systems. This ministry coordinates activities of the United Water Company that is the biggest operator on the Regions of Georgia. This ministry also supervises the Municipal Development Fund that provides investment for construction and rehabilitation of physical infrastructure of water and wastewater in Municipalities of Georgia.
  - **Local Self-Governance Institutions** are responsible for the management of water resources of local importance but they generally have very limited competences; water management is highly centralized especially water and wastewater management system. The organic law of Georgia on "LG Code" identifies municipal water and wastewater management as sole responsibility of municipalities and assigns municipalities function to invest, regulate and manage this system, However regulatory function in this sector is implemented by the National Water Regulation board, Investment function is carried our by the ministry of regional development and infrastructure via Municipal Development fund instrument. Only function that remains in the hands of municipalities is to provide subsides from municipal budgets to cover negative balance between actual cost and fees collected from households.

- The water supply and wastewater treatment service is provided by two monopolists: The **Georgian Water And Power JSC**. that is established by direct foreign investment and serves cites of Tbilisi, Mtskheta, Rustavi and Municipality of Gardabani only. Remaining territory of Georgia is covered by the **United Water Supply Company of Georgia** (UWSCG), that is a commercial (for profit) enterprise under the ownership of the central government of Georgia.

Current situation regarding sewage systems

National Level

The centralised sewage system exists in 37 towns in Georgia. 78% of the population is connected to sewerage, indicating high network penetration by international standards. The systems are, however, in poor condition. Wastewater treatment facilities are serving 33 towns, with the total daily design capacity of 1.42 million m^3. There are 19 traditional mechanical/biological treatment plants, with a total design capacity of 1.39 million m^3/day. Four purely mechanical treatment plants with a design capacity of 0.03 million m^3/day are available.

However, the plants are typically 10 - 25 years old; some are as yet unfinished, and most are not maintained. None of the existing plants is actually providing biological treatment since the technical facilities are out of order. Power and other resources are also needed. They are not delivered, as they are not paid for. Mechanical treatment is effective to a certain degree only in Tbilisi (GWP's Treatment plant serves Tbilisi, Rustavi and Gardabani), Rustavi, Kutaisi, Tkibuli, Gori and Batumi and its total estimated daily capacity is 0.7 million m^3.

Project Area

Existing water and wastewater systems in Kaspi Municipality

D. Water Supply System

Kaspi is provided with water from four various water headworks: Samtavisi, Mrgvali Chala, Lekhura, Shios Tskaro, which are supplied by natural filters of river Lekhura, within horizontal gallery system.

#	Name of headwork	Water amount (thousand m^3)	Name of zones	Length of distribution network according zones (km)
1	Samtavisi	2048,544	#1	18,1
2	Mrgvali Chala	473,040	#4	2,485
3	Lekhura	529,480	#2	12,648
4	Shios Tskaro	1000,008	#3	17,067

The total length of the potable water network is 40 - 46 km.

The water distribution network is divided into zones, there are four pressure zones.
Water consumption is of 600 - 700 l/capita/day.

E. Wastewater systems

The wastewater system is fully gravitational. There was a pumping station in 1980s, but it didn't work properly for some reasons.

The total length of the sewage network is 26 km, with 21.8 km in Kaspi main city.
The city is divided by the river Lekhura. The collectors are arranged on two sides of the river (on the left and right banks). The difference in levels of collectors is of 9 meters.

The projects for rehabilitation of the sewerage network were implemented by Kapsi municipality in 2013 - 2017. The part of the networks was delivered to United Water Supply Company of Kaspi service center. Only that networks are delivered to the company that were constructed in 2013 - 2014. The Municipality plans to completely rehabilitate the sewage system in 2018 - 2019.

The city has a separate system for rain water. However, some infiltrations of rain water should be predicted.

F. Wastewater Treatment

In the past there was a mechanical WWTP built in 1978. The Map above presents the site in the south-east part of the city close to Mtkvari River.

There was a plan to extend the Plant and build a biological part in 2000, but because of difficult overall economic situation (a collapse of the economy) this plan was not implemented.

At the moment, no WWTP operates and sewage is directly discharged into the river.

Project intervention

The project enhances knowledge at the level of the Donor and relevant ministries, and municipality, on appropriate wastewater treatment processes for small and medium sized municipalities, as the case of Kaspi municipality.

Main problems identified:

- No treatment of wastewater. Sewage is going directly to the river causing damage to the environment and especially to the resources of drinking water.

- Provision of water is not constant. On the other hand, a lot of water is wasted due to improper behaviors of inhabitants (people do not turn taps)
- Low level of tariffs not ensuring cost recovery.
- Much of water is wasted (or probably stolen as well). No precise data about water losses are available.

The intention of the Kapsi Municipality is to build one or two wastewater treatment plants:

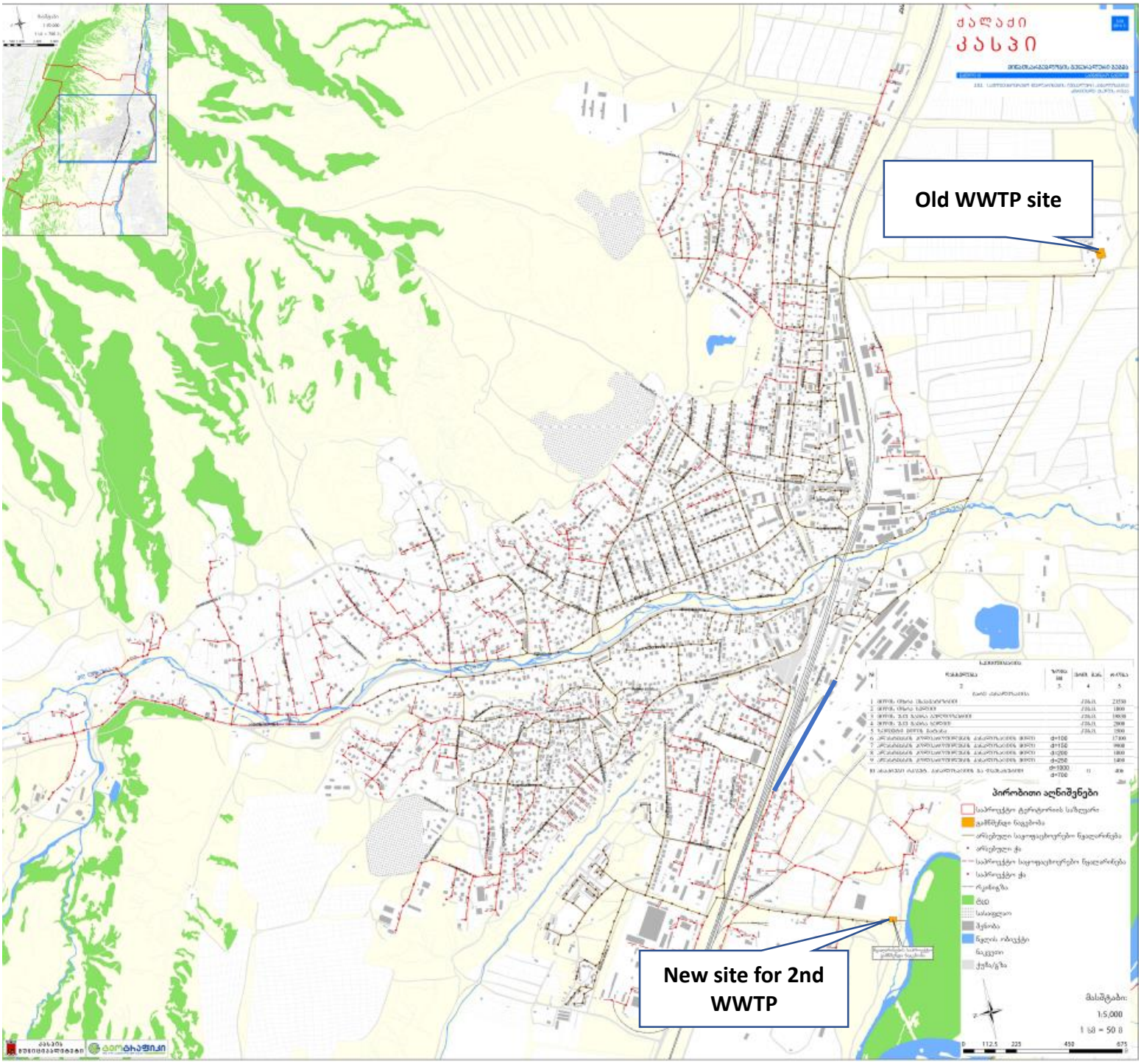
3) One on the old site (WWTP1), and
4) the other one (WWTP2) in the south-west part of the city, close to the river Mtkvari.

Both sites have been marked on the Map (see below). In both sites the land belongs to the Municipality and it seems that plots are big enough to locate a WWTP. In the neighboring areas there are no buildings in use at the moment. Both sites are well located: away from residential districts, by the river and not far from the industrial zone and the largest sewage producers.

There is about 3.5 km between sites and the WWTP1 is higher in elevation than WWTP2 (509 vs 518,24 - 9 m of difference). It seems that there is an easy possibility to direct all wastewater (sewage) to one site only (WWTP1), but a connection in the network is necessary (blue line on the Map). There is also necessary to check legal (ownership of land) and technical possibilities (pipe diameters).

It is estimated that WWTP1 will have approx. 4,000 households connected and WWTP2 approximately 1,000 households. Approx. 300 households have their own water well but provide sewage to the system. There are about 250 business entities in the city, some of them relatively large with the most well-known cement factory (Heidelberg Cement Factory of Kaspi).

Options and alternatives for wastewater treatment investments will be analyzed. This analysis will be used in a feasibility study and final designs. Technical specifications and operation and maintenance manuals for each process will be prepared. The project results will be used as a basis for establishment of an efficient planning and implementation methodology for wastewater treatment investments by the main stakeholders.


ქალაქი
კასპი
Old WWTP site
New site for 2nd WWTP
პირობითი აღნიშვნები
მასშტაბი:
1:5,000

3.3 Project purpose

To contribute to the implementation of Council Directive 91/271/EEC of 21 May 1991 concerning urban wastewater treatment (UWWTD) by supporting donors and central authorities, and municipalities in development of efficient and sustainable options and alternatives for municipal infrastructure investments

3.4 Project results

The following project results are anticipated to be achieved:

1) Description of current state and main problems and shortages of the system in place
2) Demand analysis including demographic analysis and prognosis, water production and utilization, waste water production
3) Technical and technological analysis – capacity of the WWTP (or WWTPs), most suitable technology
4) Option analysis – comparing options of building 2 WWTP vs 1 WWTP in the location of the previous one. In this second case there is a need of network development between two sites and maybe development of a pumping station.
5) Financial analysis of the project including capital costs, sources of financing, operating costs (including depreciation), operating revenues, working capital and calculation of financial indicators (NPV, IRR)
6) Organisational and legal analysis to determine the best way of project development, implementation and operation.

For both options, the following should be considered:

- Type of technology;
- Collection network;
- % of population served;
- Operation and performance;
- Management mode;
- Technical skills required for operation and maintenance of installations;
- Skills and technical capacity of local firms to construct / maintain the facilities.
- Financial aspects
- Pricing policy for treated wastewater on local level, if applicable;
- Analysis of wastewater fees recovery;
- Financing capacities for investments, operation and maintenance of networks/systems and wastewater treatment stations.

3.5 Assumptions and preconditions

It is assumed that during project implementation there is a continued political commitment in both the EU and Georgia to European integration. As regards the transposition, implementation and enforcement of relevant *acquis communautaire*, it is assumed that possible changes at political level will not interfere with capacities built and organisational improvements achieved under the project.

It is assumed that all Georgian parties involved (ministerial bodies, politicians, local authorities, NGO's, others) are willing to co-operate in the framework of the project and will make available (human) resources in order to fully support the project's activities.

It is assumed that the government of Georgia will make available sufficient national resources in order to ensure the sustainability of the project's results. In this case sustainability means that project results will be disseminated among all relevant stakeholders and consistently applied to infrastructural investments by municipalities in the wastewater sector.

A pre-condition for project implementation is close co-operation between all relevant stakeholders.

4 SCOPE OF WORKS

The Consulting Firm should be cognizant of the requirement for cost-effective projects, sustainability of project and resources, financial viability and sustainability, operational economy and simplicity, widest possible coverage, health improving schemes, and other considerations for the options analysis or value engineering / value analysis (VE/VA).

In the conduct of VE/VA, the Consulting Firm shall look at *alternative options to deliver the outputs and objectives of the projects (e.g., may include new available technologies, among others), including the associated costs, benefits and risks* involved.

The Consulting Firm shall select the best alternative and/or project components that would most appropriately respond to the project objectives and outputs, and yield the highest VfM, e.g., lowest lifecycle/whole-of-life costs.

The analysis of financing schemes and implementation options shall include an analysis of the associated financing risks and other risks involved.

4.1 Preparation of Preliminary Drawings

The preliminary drawings will be prepared with a computer-aided design and drafting (CADD) software following LWUA Drafting Standards and, as much as feasible, will include:

- General plan at a suitable scale, showing the following:

- Location of the area in the country;
- Existing water sources, existing and/or proposed sewage treatment plant, reservoirs, pump houses, transmission mains, distribution mains, sewer lines, and other significant features of the system;
- Latitude and longitude lines;
- Location of benchmarks;
- Existing and proposed roads rights-of-way (RROW); and
- Rivers, streams, and bridges.

- Maps of transmission main showing the diameter, type, and position in street of the proposed mains and/or existing sewer mains and laterals.

- Longitude profile, if possible, of transmission pipes and sewer mains that should indicate invert levels of main, location, size, and nature of obstructions and ground levels.

- Drawings regarding the existing buildings pump houses and other structures to be retained showing: existing components to be either abandoned or rehabilitated, and the proposed works;

- Maps of the distribution network showing the proposed pipelines and the remedial works required to the existing pipelines; and

- Drawings for new structures such as intake, pump houses, ground and elevated reservoirs/tanks, water treatment plants, sewage treatment plant, and others; the drawings will include plans and sections necessary to identify each structure in sufficient details.

4.2 Preparation of Cost Estimates

A bill of quantities (BOQ) shall be prepared, broken down into civil works (labor and construction material) and goods (equipment and related materials) to be procured either internationally or locally.

The total cost of the project will be prepared on the basis of price levels prevailing locally and internationally at the time the preliminary design is prepared.

	COSTS	DETAIL OF COSTS	PARAMETERS	COST DEFINITION (FORMULA)
INVESTMENT COSTS*				
	Civil Works			
1	WWTP		Population	40% of total WWTP's cost
2	Trunk line		Length	Acc. diameter and other parameters
3	Pumping station (if needed)		Population and topography (difference of level)	Acc. the energy of pumping
	Total Civil Works Annual cost		Life time / writing off period (40 years)	(1+2+3)/life time + 3%(1+2+3)
	Mechanical and electrical equipments			

1	WWTP	Population	60% of total WWTP's cost
2	Pumping station (if needed)	Population and topography (difference of level)	Acc. the energy of pumping
	Total Mechanical and electrical equipment Annual cost	Life time / writing off period (12 years)	1/life time
	Total Investment costs		Total CW + M&E equip.
MAINTENANCE/REPAIRS COSTS			
1	Maintenance and repair of the M&E equipments (annual costs)	M&E equipments annual costs	4% (M&E equipments annual costs)
LABOUR COSTS			
1	Salary costs for the staff taking care of the WW system	Number of hours worked / hourly salary	Salary costs (yearly salary)
2	Administrative costs	Salary costs	25%(Salary costs)
	Total labour cost		(1) + (2)
OPERATION COSTS			
	Energy consumption costs		
1	Network consumption	Energy consumption / m^3 delivered	0.15 €/ kWh
2	Pumping consumption (if needed)	Population and topography (difference of level)	0.15 €/ kWh
	Total Energy consumption Annual cost		[(1) +(2)] x 365 x 24 h
TOTAL ANNUAL COSTS = INVESTMENT + MAINTENANCE/REPAIRS + LABOUR + OPERATION COSTS			

4.3 Environmental Assessment

The Environmental Expert will have to verify the condition of the project area and carry out the environmental assessment in accordance with existing regulations.

Therefore, the environmental assessment for the project will have to ensure that the necessary protection measures and actions are identified and included in preparing the cost estimates of the proposed systems and also included in the preliminary design.

4.4 Economic and Financial Analysis

The *economic analysis* will consider the following:

- Economic cost of the project including capital costs, capital equipment with economic life shorter than adopted discount period, incremental annual operation and maintenance (O & M) costs, costs for environmental mitigation measures; and

- Economic benefits quantifiable (e.g., savings from use of additional water available, public health benefits, fire damage savings, etc.) and non- quantifiable (environment and development impacts).

The quantified benefits will be evaluated “with” and “without” the project. Costs and benefits will be valued at constant prices and no price contingencies will be included in the economic cost of project. The analysis will determine the average incremental cost of water, and the economic indicators of economic internal rate of return (EIRR) and net present value (NPV).

In addition, sensitivity and risk analysis will be performed to assess the effects on the project by changing the value of some variables and calculating the changes in the EIRR and NPV. The results will be presented together with recommended actions or variables to monitor during implementation and operations.

5 TIMELINES AND DELIVERABLES

5.1 Commencement Date and Period of Implementation

The Study shall be completed within a period of ***24 months***, commencing from the date of receipt of the Notice to Proceed (NTP).

5.2 Table of Deliverables

TBD

Deliverables	**Timeline**
Draft Inception Report, including the finalized Work and Financial Plan	
Final Inception Report	
Monthly Progress Reports	
Plans and specifications / Final Report	

6 EXPERTISE REQUIREMENTS AND QUALIFICATIONS

The studies shall be undertaken by a Consulting Firm, which shall field in the following key experts to undertake the concept designs for the WWTP in Kaspi:

TBD

7 CRITERIA FOR SELECTION

The Contracting Authority (CA) should select a tender method and process that suits the procurement, its level of risk, is timely, avoids creating unnecessary costs for Tenderers and safeguards the security and confidentiality of all Tenderers.

Subject to legislative requirements, the Tender may be let by various procedures of which the most commonly used are:

i) Open Tenders;
ii) Selected Tenders and;
iii) Preregistered (Selective) Tenders.

Open Tendering requires the Principal to advertise the "Invitation to Tender" in a relevant newspaper, provide pertinent project details, invite the public to Tender and inform prospective Tenderers of the closing place, date and deadline of tender submission.

Selected Tendering follows the same general procedure as Open Tendering with the exception that only those tendering organisations that have shown prior competence in similar projects may tender the project.

Alternatively, the tendering organisation may acquire this status by submission and acceptance by the CA of information relating the organisation's ability to execute similar projects. Such information would be furnished and accepted prior to the Principal inviting a Tender. A register is maintained by the CA and regularly reviewed. Organisations are invited to Tender as Work is required after reference to this register.

Pre-registered (Selective) Tendering is a two-stage process involving an advertised invitation to respond to an Expression of Interest from interested Tenderers in lieu of an invite to tender. The CA will use an "expression of interest" process before it invites tenders. The CA will advertise publicly the purpose and nature of the Contract or project and the date by which it will invite Tenders. The aim at the expression of interest stage is not to elicit Tenders, but rather to assess the capacity of the respondents to undertake the Work or project, and to refine the specifications.

Tender Documents are the written details of the goods and services required and should include a copy of the proposed contract between the CA and the Contractor. For civil

engineering works, there will be copies of plans, drawings and specifications and where appropriate, a Bill of Quantities. The Contract plans, drawings, specifications, Bill of Quantities and/or Schedule of Rates and Prices, Letters of Agreement will form the basis of the contract between the CA and the Contractor.

Tender documents should specify the CA requirements clearly and indicate the criteria for evaluation, including the weighting given to each evaluation criteria. All parties should have regard to the costs of tendering to the industry and the community at large, and avoid calling repeated rounds of tendering.

8 SOURCE OF FUNDS

Funds for the conduct of subject feasibility studies will be further identified.

9 INSTITUTIONAL SET-UP/RESPONSIBILITIES

TBD

10 APPROVED BUDGET FOR THE CONTRACT

TBD

11 PAYMENT SCHEME/SCHEDULE

TBD

Caste Study: Tsalka

Part 3

Tourist development in Tsalka and its position in a more general Municipal plan

Tsalka is located in Kvemo Kartli in southern Georgia with a population of approximately 19,000 and according to the 2014 census comprises a mixed population of Georgians, Armenians, Aziri, and Caucasian Greeks. This is a cosmopolitan society and provides diverse opportunities for different developments.

The tourism activities have the support in principle of the Agency for Tourism and in recent years the municipality has tried to refine their approach and activities in respect of a number of potential tourist developments.

There are a number of interesting and attractive geophysical features in the immediate area around the city. These include important historical monuments in Tsalka; Kldekari Fortress (ninth century) and the church of St.George in Dashbashi (tenth-eleventh centuries), and Dashbashi canyon is also an interesting tourist attraction which is one of the largest canyons in Europe and which last year attracted a large number of tourists from Georgia and Internationally.

Historic fortress

Dashbashi Church

Analysis by the private and nongovernmental sectors have identified potential areas in need of support and there are opportunities to exploit some of Tsalka's eye-catching natural landscapes and hospitable farmers which provided the basis for developing agri-tourism and eco-tourism in the municipality as well as more traditional tourist attractions. In particular improvements to tourism infrastructure in Tsalka and training for potential tourism service providers were provided by the Food and Agriculture Organisation (FAO) in 2017 in respect of agri-tourism.

The town has recently undergone modest infrastructural upgrading and is now improving its ability to host tourists, offering them better touristic infrastructure, new tourist routes and

better trained tourism service providers. However, there are still considerable improvements possible and these need to be carefully managed.

For example, three touristic routes were identified for three different types of "active" tourism – one for hiking, one for bicycle touring, and one for automobile touring. The routes were laid out to include most of the important cultural and environmental points of interest in Tsalka – the famous Dashbash canyon, 22 cultural heritage sites including churches dating back as early as the 11th century, and guest houses and farms offering products for tourists.

Identifying possibilities to enhance the capacity of the area's tourism sector was another aspect of the draft programme. Some 25 potential tour guides – 12 women and 13 men – from 13 different villages of Tsalka municipality attended three days of intensive training. The course covered rural tourism and guesthouse operation standards, marketing and business plan development and ecotourism principles.

It is intended to assist in developing and promoting several potentially attractive tourist sites. The ambitions of the municipality are to improve the existing facilities to accommodate this increased interest and to exploit additional possibilities. At present there are too few hotels, refreshment places and other suitable shops. The municipality has created some "pic-nic" places near the canyon, but there is potential for far more investment if they can create the appropriate commercial environment.


Canyon

PCM approach applied to Tourism development

The PCM approach utilises a number of different techniques to identify potential projects, and these can be adapted to different purposes with specific project requirements. In this case, the Stakeholder analysis matrix and the METAPlan approach can be used to identity particular Infrastructure projects and programmes, which can support different tourist activities and objectives.

In respect of tourism in Tsalka, the following potential areas and ideas were identified during initial discussions. These form the basis for further more detailed analysis of the options and potential for each alternative based on the realistic assessment of the involvement of the different actors, and to identify how the projects interact and influence each other.

The step by step method that underpins the PCM approach assists in the careful analysis of the potential alternatives and helps to focus the thinking into clarity, and importantly, posing the right questions about the alternatives.

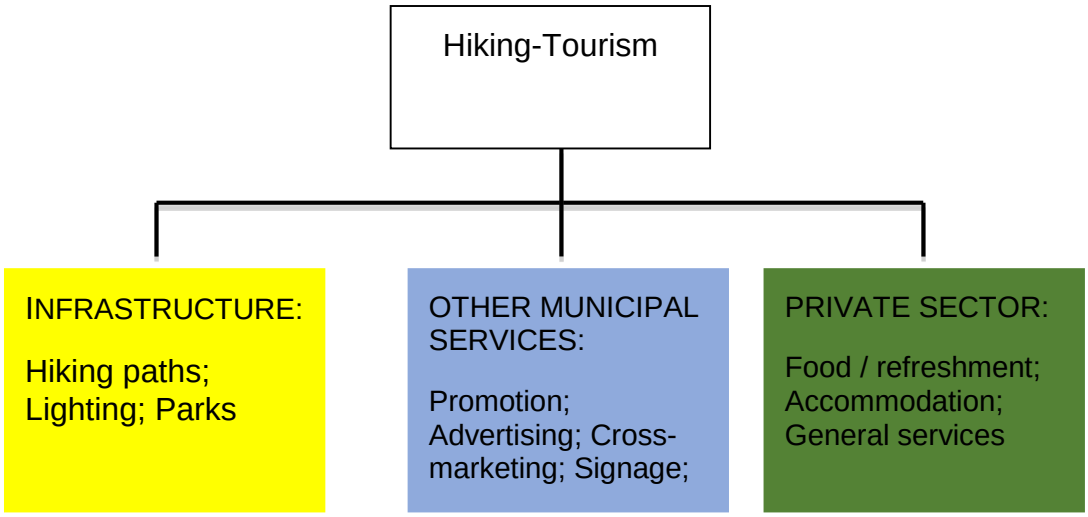
Each of the main tourist ideas can be examined in more detail, utilising the PCM approach to highlight potential Stakeholder expectations and obligations. The questions arise for the Infrastructure services division, the wider needs of the municipality, and the potential issues for third party investors.

The principle purpose of the PCM approach is to raise questions and identify areas where clarifications can lead to better cross-referencing to other projects and to identify where collaborations exist. It also servers as a basis for ensuring that projects are developed with a high level of cohesion and avoid unnecessary duplication of activities or 'double work'.

Given the background situation, the municipality has been considering how to expand its potential for economic development and it became necessary for them to have a far clearer development plan or project(s) that could stimulate this development. This case examines the discussions held with the municipality on touristic development, and more specifically, on developing the geographical possibilities in the municipality.

As was previously identified, there are many potential opportunities for economic development based on a variety of touristic options and offers. This next phase integrates the potential projects into a more general plan and identifies the possible cross-links and inter-dependencies between the specifics in this project, and other development possibilities.

From the previous analysis the municipality had an outline of what such a concept would comprise and the core idea on hiking is replicated below. However, this project idea has now been refined into a more general form of track or walkway, which can in fact be used by tourists on foot, or by other means of transport, including cycles and even horses. (The latter would require the investment of a third party but should be considered during the design and identification phases.) The original, more limited idea is replicated below.



Following further thought and discussions, the concept is evolving into a more utilitarian idea of a single, multi-purpose track or route initially connecting the centre of Tsalka with the canyon, with additional routes to be determined once this preliminary route is connected and assessed. In addition, a "rope" bridge or walkway would be constructed connecting both sides of the canyon to provide an additional tourist resource, and to create an alternative "sight-seeing" opportunity.

The idea now is to connect the canyon with the objective of bringing other heritage sites together with some form of multi-purpose track, which would be relatively moderate for walking, but can also be used by other types of user, at a later stage.

The 'rope' bridge would connect two sides of the canyon

This further analysis was based on a Stakeholder assessment of the different tourist types who might view such a facility positively, and encourage their stay in Tsalka.

This showed that there was no real difference in expectations between Georgian and International tourists due to their nationality, but there were common issues and needs among the stakeholder types overall.

Such groups were identified as:

- Disaggregated by age: young, middle aged, older/retired
- Disaggregated by family relationships: single, young family, couple no children
- Disaggregated by activity level: serious hikers, casual hikers, general tourists

It was further identified that Tourist Stakeholders wanted a wide range of different facilities although almost every type of Stakeholder wanted the minimum access to most of the identified needs:

- Variety of "challenges" with the walks

- Alternative ways of taking the “walk”, i.e cycles, horses, on foot
- Potential ‘rest’ areas
- Site-seeing: natural, historic, archaeological
- Options to buy food/refreshments
- Pic-nic areas
- Child-friendly areas
- Safety of the walk (particularly for children and older tourists)
- Appropriate lighting
- Toilet / ‘comfort’ facilities
- Shops selling appropriate equipment, clothing etc.

When the project is designed all of these considerations need to be assessed and where possible brought into the project activities. Many of these refer to the actual location, or design of the chosen route, but in addition the design has to identify those which are supplementary to the route itself and either ensure it is safe, or offers variety and additional services and features.

In addition, access to the canyon itself needs to be upgraded, and this will be competed concurrently with the creation of the cycle/foot path to the canyon. Existing paths are difficult to use, and have a potential health hazard as they are uneven and run down a steep slope.


Looking further ahead to the cooperation with the private sector, the role of the municipality on creating a friendly environment for investment should also be considered as this will have to form one component of any project that is implemented as the success of the tourist route may be contingent upon these additional features and services.

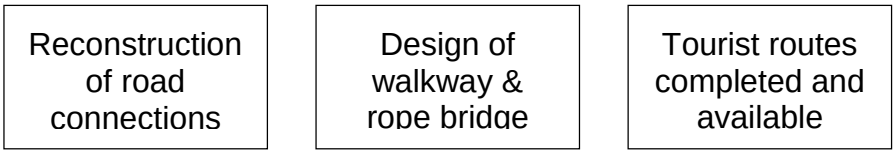
For example, the municipality itself is unlikely to be managing a café, but it needs to ensure that conditions exist at a suitable point in relation to this hiking path that makes this an attractive possibility for an investor. This requires the implementation of appropriate infrastructure facilities, roads, water, electricity, canalisation etc. and must therefore also be part of project activities, either directly under this project, or complimentary under another project.

If the latter, then there needs to be close project coordination to ensure that the outputs of the respective project activities are compatible with the final timeframe of the hiking route.

A further consideration is how, if at all, the municipality should be “marketing” or promoting this new feature for potential tourists. The cooperation of national or regional promotion,

together with any local initiatives has to be considered. Either these rest as activities in the project, or are necessary external factors, which the project should be monitoring. The cooperation with other local municipalities is an additional factor that should be considered at the design stage for the project concept.

With these various factors in mind, a form of Logical Framework can be developed following the model. Such a LogFrame would probably comprise the following Components, or Result-Chains, but this would be confirmed during the final design stage if the project idea was approved for implementation.

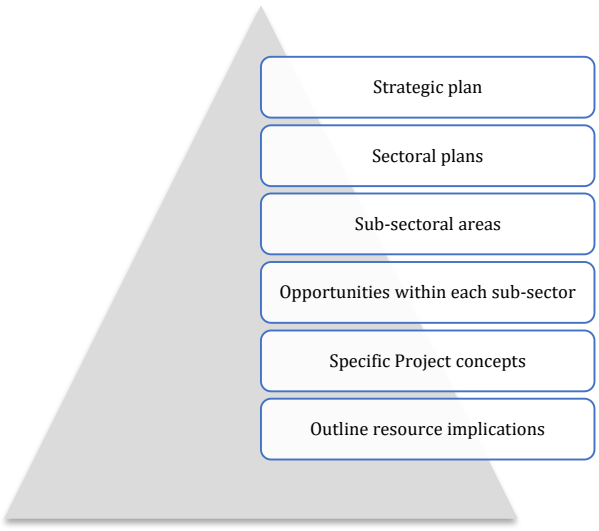


These would be completed with an assessment of the resource implications for each output, and the necessary Human Resource and financial requirements and the external factors, including the promotion and advertising of these new facilities.

Finally, the project should also have some identified indicators for the various activities and outcomes expected (referred to as OVIs – Objectively Verifiable Indicators in the PCM approach). The challenge for the municipality is that there are few reliable statistics for tourism, accommodation stays, general economic activity etc. to tourism and this increases the difficulty of identifying realistic OVIs. It may be that the project will also have to include as activities some data collection methods and approaches.

So, the analysis of touristic potential has moved to the stage of beginning to refine a project idea. The next step will be to complete a form of Project Concept paper or outline project. This, together with the other project ideas identified through the strategic disaggregation process will inform the municipality about its choices, and the resource implications for, not only the infrastructure services division, but other services and department. It may also identify Human Resource gaps and lend additional criteria to the selection of projects across all services in the municipality.

The point of the approach is to remain flexible in identifying potential projects, adapt them as necessary until a realistic project idea can be formulated, and then consider the implications across the entire municipality in terms of its various resources, human and otherwise. Throughout this process, as other project ideas are identified and refined their relationship to the overall Municipal planning must be consistent. The model for this is illustrated below.


Strategic plan
Sectoral plans
Sub-sectoral areas
Opportunities within each sub-sector
Specific Project concepts
Outline resource implications

General Project Concept paper

Objectives of the action = IMPACT	To increase tourism by x% (to be based on realistic possibilities) To increase economic activity in the Municipality by x% (to be based on realistic changes) To increase employment opportunities by x% (based on actual activity and realistic possibilities)
Target group(s)	Municipal infrastructure assets
Final beneficiaries	Tourists (National and International) Entrepreneurs (Hoteliers, Restaurateurs etc.)
Estimated results	New hikers/cyclists' route accessible Increased tourist activity
Main activities	Route design and developed Walk-way, bridge designed and completed Completion of subsidiary features, (e.g. pic-nic areas; play areas etc. as applicable)

Description of project activities

4. Preparation of Environmental Impact Assessment
5. Design of feasible Project for creation of cycling route(s)
6. Design of appropriate promotion activities

Relevance of the project to Municipal Strategic objectives

The creation of alternative tourist services and activities will increase potential Tourism and offer new options for visitors thereby increasing municipal revenues and general economic activity

Target Group(s)

Once completed the mountain route(s) will attract interest from a more diverse tourist group, including active tourists, walkers, hikers, and cyclists both Nationally and Internationally

Any additional "added-value" impacts

The development of alternative "offers" for tourist will result in greater tourist activity and visitor volumes. These additional visitors will require more services, such as new/alternative types of accommodation; new and varied food/refreshment options; and access to new shops and services. These create possibilities for investors to identify specific products or services and thereby increase economic activity and profitable ventures.

Draft Logical Framework of the Tsalka Project

	Results chain	Indicators	Baseline (incl. reference year)	Current value Reference date	Targets (incl. reference year)	Sour mea verif
Overall objective: Impact	Increased economic activity Increased tourism activity in both numbers of tourists and the related economy Increased employment in both direct tourist activities and related supplementary tourist "offers"	% increase in tourist numbers % increase in % increase in tourist related jobs	Based on initial statistical data, OR new Baseline study	TBA	Specific % increase by DATE	To be from th partne strateg
Specific objective(s): Outcome(s)	Oc 1: Reconstruction of roads system to canyon Oc 2: Walkway operational and accessible Oc 3: Tourist routes completed and accessible	OC 1: Road fully operational Oc 2: Walkway utilised by xx tourists Oc 3: Route(s) completed and accessible	Oc 1: NA Oc 2: NA Oc 3: NA	Oc 1: NA Oc 2: NA Oc 3: NA	Oc 1: Road open and used Oc 2: Walkway open and used Oc 3: Mountain routes accessible	Oc 1: visit Oc 2: Munici Counc approv projec Oc 3: locatio Mount routes
Outputs	Op 1. (related to Oc 1): Road upgraded Op 2 (related to Oc 2) Walkway completed Op 3 (related to Oc 3)	Op 1: On site visits Op 2: Project design and implemented	NA	NA	Op 1: Report	Op 1: constr "signe munici Op 2: approv counci aadop munici asset

	Tourist route(s) completed and open to the public	Op 3 Tourist routes open				Op 3: access tourist
Activities	*Key Activities* A 1.1: Design of road connections A 1.2: Tender for works completed A 1.3: Contractors complete implementation of Road project A 1.4: Roads completed and signed off by municipality A 2.1: ToR for Project design completed A 2.2: Tendering process completed A 2.3: Contractor approved and selected A 2.4: Project design submitted A 2.5: Project design approved by Municipal council A.2.6: Project implemented A 3.1: ToR for tourist routes project completed A 3.2: Tendering process completed A 3.3: Project implementation company contracted A 3.4: Specific tourist routes identified and basic preparation completed A 3.5: Routes finalised A 3.6: Hand-over to the Municipality A 3.7: Promotion and "Official" opening of routes completed	***Means:*** *What are the means required to implement these activities, e. g. staff equipment, training, studies, supplies, operational facilities, etc. TBA* ***Costs*** *What are the action costs? How are they classified? (Breakdown in th Budget for* the Action) TBA				

Draft Terms of Reference for Project Design – an example.

The full technical details would have to be added to the Terms of Reference based on the specific situation.

ToR Template

1. Background

Tsalka is located in Kvemo Kartli in southern Georgia with a population of approximately 19,000 and according to the 2014 census comprises a mixed population of Georgians, Armenians, Aziri, and Caucasian Greeks. This is a cosmopolitan society and provides diverse opportunities for different development.

Analysis by the private and nongovernmental sectors have identified potential areas in need of support and there are opportunities to exploit some of Tsalka's eye-catching natural landscape, which provides the basis for developing agri-tourism and eco-tourism in the municipality as well as more traditional tourist attractions. In particular improvements to tourism infrastructure in Tsalka and training for potential tourism service providers were provided by the Food and Agriculture Organisation (FAO) in 2017 in respect of agri-tourism.

There are a number of interesting and attractive geophysical features in the immediate area around the city. These include important historical monuments in Tsalka; Kldekari Fortress (ninth century) and the church of St.George in Dashbashi (tenth-eleventh centuries), and Dashbashi canyon is also an interesting tourist attraction which is one of the largest canyons in Europe and which last year attracted a large number of tourists from Georgia and Internationally.

The focus of the project is to provide a tourist attraction (the Dashbashi canyon) with complimentary services and features to attract an increased volume of tourists who have a variety of features to enjoy and to increase the number of days visitors remain in the municipality.

Tourists require easy and available access to the canyon, with proper information about the features and access to both accommodation options and other supportive services such as food and refreshment facilities, pic-nic areas, toilets etc.

To be added: technical information about tourist numbers, seasonal visits, existing economic impact, employment details, range of additional services available, any other existing investments relating to the project idea and the tourist sector in general.

Reference to existing Strategic plans fo the municipality, together with other initiatives in the tourist sector or other sectors which impact on the tourist sector positively or negatively.

Information on former or existing projects and details of these deliverables, donors, etc. and the influence this has on the proposed project design.

2. Objectives of the Project

Given this background, the municipality is considering how to expand its potential for tourist development and the idea is to improve the connection between the town and the Dashbashi

canyon with the objective of bringing other heritage sites together with some form of multi-purpose track, which would be relatively moderate for walking, but can also be used by other types of user, at a later stage. There is also a requirement of joining both sides of the canyon with a footbridge to facilitate a "circular" walking route, which is expected to add value to the experience for visitors.

The project needs to be able to improve access to the canyon via connections with the city of Tsalka. This requires the renovation of the existing road to a high standard of finish. The work must be completed according to all appropriate National standards and the outputs will be measured against these technical requirements. The tourist sector is an important one for the municipality and the project is a crucial step in improving the tourist sector and creating a positive environment in which the sector can flourish.

In addition a footbridge needs to be constructed across the canyon in a suitable location and constructed to all National standards. Outputs will be measured against these requirements. The innovative footbridge can provide additional benefits to visiting tourists and needs to be designed as a complimentary addition to the proposed tourist access to the canyon.

In addition tourists need access to good quality information about tourist features and locations and the project design should include proposals for how this information should be made available to potential tourists.

The project design is anticipated to have three phases and this contract is expected to provide the detailed analysis of the situation and present a proposal that adheres to these requirements and is a suitable, realistic and feasible solution to the issues presented below.

3. Anticipated Methodology

The project design process is anticipated to have the following phases and activities

3.1. Conduct field research on the potential location of road connections to the canyon

3.2. Assess the technical aspects of the construction of the proposed road

3.3. Identify any technical issues that need to be addressed and propose solutions

3.4. Identify the location of the footbridge and proposed solution

3.5. Identify Indicators and Sources of verification for the completion of the proposed works

3.6. Develop the Monitoring & Evaluation framework for the project

3.7. Provide a detailed budget to include full explanation of costs and any conditions that apply

The Deliverable for this contract is a completed Project Fiche to include narrative of the Project, a Logical Framework, Risk assessment and Mitigation plan, Budget, and anticipated Work schedule/Time plan.

The duration of these activities is anticipated to be three months.

4. Expertise required

The contractor should be able to demonstrate broad experience in preparing project concepts and project designs and able to confirm at least three other projects of a similar scale and budget.

The contractor also needs to demonstrate a clear understanding of Project Cycle Management and the use of the Logical Framework.

5. Reporting schedule

The deliverable is a full project design compatible with Project Cycle Management principles including a full Logical Framework and Risk assessment and Mitigation plan together with proposed Project Indicators and appropriate Sources of Verification.

The contractor should provide three hard copies and digital versions of the project design.

6. Work plan

The project design should be delivered within three months of the signing of the contract for work.

Case Studies Part 4

Tetritskaro

TETRITSKARO MUNICIPAL

TOURISM DEVELOPMENT STRATEGY

FOR 2019 –2023


სასტუმრო კახაბერი
HOTEL KAXABERI
Marneuli-Tetritskaro-Tsalka
თეთრიწყაროს პარკი
Marneuli-Tetritskaro-Tsalka
თეთრი წყარო
3D

Content:

Annexes:

Administrative centre: Tetritskaro (Tetritskaro municipality)

Population density: 21.6 person/square meter

Area: 1,174.5 km^2

Population: 21,127 (2014 year)

- An area of mixed woodland and grassland, grazing areas below and above the natural, largely broadleaved woodland
- Mountain tops again obscured by low cloud
- Grasslands very green, good pasture, good condition
- Transhumance route passes close to the village – very trampled and poached

Photo 1: Transhumance - sheep and cattle en route to winter pastures, east of Tetritskaro

1. Outline of the Georgian National Tourism Strategy 2015-2025

The purpose of the Georgian Tourism Strategy 2025 (elaborated in 2014) was to create a road map for increasing the value, profitability and sustainability of Georgia's tourism industry.

The goal is to define and implement a plan for transforming resources and assets into the world-class tourism products, destination sites and create visitor's experiences that will attract tourists from the region as well as from the world highest spending travel markets, including EU, North America, Middle east and Asia. As a result, increase number of international visitors' expenditure, contributing to the national economy and local development.

National strategy main indicators defined for the 2015 - 2025 (in 2014)

National strategy targets planed by 2014	2015	2025
International visits	5,515,559	11,000,000
International tourism revenue	1.8 bl.$	5.500 bln. $
Share direct in GDP	6%	6.7%
Job's crated by tourism	180.000	335.000

Average expenditure per visit	320 $	500 $
Length of stay per visit – days	4.3	5.3
Direct foreign investment in tourism	559 ml. $	910 mln. $
Visits from neighborhood countries	88%	80%
WEF tourism competitiveness index	66	35

Considering WTTC (World Tourism & Training Center) Country travel and trade report 2017 shows accretion of the increase of planned indicators. Georgia is one of the fastest tourism growing country over the globe – nominated as a one of the 10 best destination countries to visit!

Visitors statistic and economy WTTC country report Jan 2018	**2016**	**2017**
International visits and y/y growth	6,360,503 +15%	7,554,936 +18%
Tourists with overnight stay (+24 hours) and y/y growth	2,720,970 +57%	3,500,000 + 28.8%
Tourism total contribution USD	2,16 bln	2,7 bln
Direct contribution in GDP	8.1%	7,1%
Number of states with free visa	98	98
Direct flights to the countries	90	90
Number of registered hotels/GH and y/y change	1,945 High growth	2,100
Registered double rooms (hotels and B&B)	27,366	33,000
WEF tourism competitiveness index	70	67

Countries of the origin of visitors:

Country	2017	y/y 2016-2017
Armenia	1,718,000	+14,8%
Azerbaijan	1,694,000	+11,2%
Russia	1,392,000	+34,1%
Turkey	1,246,000	-0,8%
Iran	0,322,838	+118%
Arab States and Gulf Counties	0,056,247	+164%

Growth of the number of visits by length of stay:

Tourists with more than 24 hours stay	3,478,932	+ 46%
Transit	1,687,289	+ 22%

Less than 24 hours stay	2,388,175	+ 32%

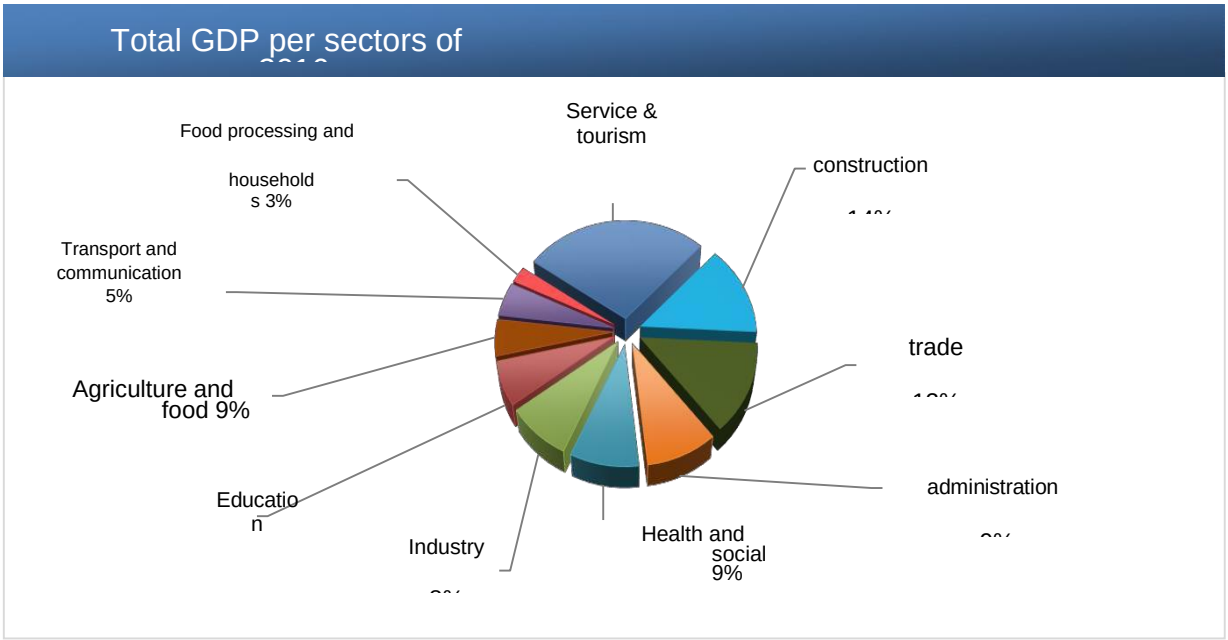
Visitors from EU states growth +15%;

Top five EU countries: Poland, Germany, UK, Greece, France

Priority interest and areas for visit: Adjara – leisure and holiday; Kakheti – wine and culture; Mtskheta-Mtianeti – mountain and adventure;

Main facts in figures:

GDP distribution per sectors of economy.



Employment:

Total employment (registered) for 2016 is 189,400 persons, 56% of the total population 340,000. This includes registered employment by number 164,900 persons as contracted (services) jobs 75,200 (46%) persons and self-employment 89,700 persons (54%).

Official unemployment is 13% (*Source: Georgian statistics office*).

Economy of tourism: hotels and restaurants

Hotels and food and beverage 2016 (y/y growth 30%)					
	2012	**2013**	**2014**	**2015**	**2016**
Turnover in ml GEL	95	119.9	134.1	170.9	225.3
Production (services delivered) in ml. GEL	99.3	119.3	137.2	170.0	246.1
Jobs created persons.	4 109	5 826	6 002	6 082	6 510

GNTA Mission

The mission of Georgian National Tourism Administration is to ensure sustainable tourism development through positioning Georgia as a unique travel destination on the international tourist

map, improving visitor experience and maximizing their expenditures to significantly contribute to the national economy by effective cooperation with strategic partners.

GNTA Vision

To showcase Georgia as an undiscovered unique travel destination to the world, encourage to explore once and inspire to come back.

2. Overview of the tourism development (agri-tourism) in Kvemo Kartli region

With a strong agricultural history, many regions in Georgia have tremendous opportunity to diversify their list of product and service offerings with agricultural tourism. Agricultural tourism increases the potential for higher margin, on-farm sales of value-adding products and services, further diversifying the product line of the farm operation.

While work has been undertaken, an agritourism strategy has not previously been developed.

Stakeholders of both the private and public sector have recognized the need for such a strategy and have played a collaborative role in the development of these strategies.

The objective of the strategy is to promote sustainability and completeness in rural communities

through the production of products, experiences and services that link agricultural activities to tourism in ways that foster food security, environmental sustainability and sustainable use of natural and cultural resources, validate traditional knowledge and lead to the sustainable livelihoods.

While there are many definitions, agritourism can be defined as visiting a working farm or any agricultural, horticultural, or agribusiness operation for the purpose of enjoyment, education, or

participation in the activities of the farm or operation.

Around the world, Agritourism has become vitally important to farmers for two key reasons:

- *Pressures have forced farmers to use diversification strategies to increase their income opportunities*
- *The growing market demand for more non-urban vacation experiences and interest in travel within a rural environment*

Tourists are seeking "country" destinations because of:

- *Desire to escape city life/urban centres*

- *Growing interest in natural environments*
- *Search for less commercialized and inexpensive holiday alternatives*
- *Interest in authentic culture, farming heritage, good quality local foods and lifestyles*

These factors in combination with better access to rural areas are making agritourism a popular form of diversification for a growing number of farmers, rural communities, and tourism operators.

The **potential benefits of agritourism development** extend to farmers, rural communities, and tourism operators and in turn have a strong potential to contribute to the regional and national economy.

Farmer Benefits

- Improving incomes and revenue streams
- Supports additional on-farm revenues directly to family members
- Expanding farm operations
- Utilization of farm-based products in innovative ways
- Developing new consumer market niches
- Increasing awareness and in turn demand of local agricultural products
- Improved living conditions, working areas and farm recreation opportunities

Community Benefits

- Diversification and strengthening the rural economy via job and income creation
- Generates additional revenue for local businesses and services from tourists
- Increases protection of rural landscapes and natural environments for residents as well as tourists
- Upgrading and revitalization of community facilities for residents and visitors;
- Preserves local traditions, art and craft
- Supports promotion of inter-regional, inter-cultural business and communication

- Promotes the on-going use of local agricultural products and services
- Provides an active business environment in attracting other businesses and small industries

Tourism Benefits

- Diversification of mix of tourism products and services available to visitors
- Supports increasing tourism flows into rural regions
- Increases season length during traditionally off-peak periods
- Uniquely positions rural regions in key tourism markets
- Increased contributions of non-local currency to local businesses and local economy

3. Tetritskaro municipality and new opportunities for tourism development

Kvemo Kartli, situated in the south-east part of Georgia shares internal borders with Samtskhe

Javakheti, Tbilisi, Shida Kartli and Mtskheta-Mtianeti and Kakheti and international borders with

Republic of Azerbaijan and the Republic of Armenia.

The region includes 347 settlements – 7 cities, 6 towns and 334 villages and comprises the seven self-governing municipalities of Rustavi, Dmanisi, Tsalka, Tetritskaro, Gardabani, Marneuli and Bolnisi.

The population of the region is 511,300, with 39% of the population of the region living in cities and towns, and 61% live in villages. Ethnic Georgians make up 44.7% of the population while 45.1% are Azeri, 6.4% is Armenian, and 3.8%is Abkhazian, Ossetian, Russian, Greek, Ukrainian and Kurdish.

With a strong agricultural history, many regions in Georgia have tremendous opportunity to diversify their list of product and service offerings with agricultural tourism. Agricultural tourism increases the potential for higher margin, on-farm sales of value-adding products and services, further diversifying the product line of the farm operation.

Economic Development

According to the Regional Development Strategy, the business sector comprises of 31,250 subjects, including 237 medium size and 106 large operating enterprises are registered in the region. While Kvemo Kartli is home to branch offices and service centres of almost all banks operational in Georgia and micro-financing organisations has inceased, interest rates for credit and loans are high.

Agriculture

Climatic conditions of the region are particularly favorable for the production of agricultural products. Crops can be harvested 2-3 times a year, which conditions the high competitiveness of Kvemo Kartli as compared with other regions. While agriculture employs 29% of the population of the region and 47.8% of rural population, in the main they are small household farms (less than 1 hectare) and fall into the self-employed category. Due to the proximity with

the capital city and neighboring states, they sell produce such as early potatoes, vegetables and various animal and farm products, there is little, or no contract farming undertaken, rather farmers rely on getting the most competitive price post-harvest.

Tourism

While geographic conditions, natural, cultural and historical monuments, together with close proximity to the capital, Tbilisi the main catchment area for overnight visitors, tourism to the region, in terms of visitors and in particular expenditure, is very low. The regional development strategy highlighted horse riding, hunting tourism, ecotourism, educational tourism, family tourism, ethnographic tourism, agritourism, treatment & rehabilitation tourism, etc., as areas for potential development in the region.

Recreational zones such as Manglisi accommodate up to 10,000 persons per year in existing sanatoria and rest homes. While resort zones also exist in Dmanisi, Bolnisi, Tetritskaro, Gardabani and Tsalka municipalities, tourist facilities do not comply with modern standards. Improvement of tourism infrastructure is both a challenge and opportunity for the region.

Kvemo Kartli have high-lighted Improvement of Tourism Infrastructure as a key goal in the Regional Development Strategy, with particular emphasis on:

- *Conservation, protection and maintenance of cultural and historical monuments (in cooperation with the Ministry of Culture of Georgia)*
- *Encouragement and facilitation of sufficient number of high-quality hotels, restaurants, cafeterias, fast food facilities, camping sites, lighting systems, public toilets, vehicle parking areas and gift shops around tourist attractions*
- *Facilitation of transformation of real village homes into family hotels in small and remote mountainous regions together with the supply of ecologically pure agricultural products*
- *Facilitation of construction of huts, recreational pavilions and stables for hunters and fishermen*
- *Renovation and development of access roads and infrastructure to historical and cultural monuments*
- *Improvement of information infrastructure of the region; installation of road signs pointing to tourist facilities along the roads and truck roads in towns, villages, as well as boards with street names and numbers (showing direction) in Georgian and English languages*

• *Arrangement of bilingual (Georgian and English) boards displaying transport movement at*

official stops of municipal transport to make tourists' movement easier

Kvemo Kartli is home to a vast range of archeological, cultural and heritage sites of international

importance including but not limited to Dmanisi, Imri, Gardabani Reserve and Algeti National Park.

On the whole there are over 650 historical monuments in Kvemo Kartli, 300 of which are included in various tourist routes.

The pre-historic settlement of Dmanisi is considered a great archeological discovery on an international scale. According to finding, hominids lived in Dmanisi 1.8 million years ago. Consequently, Dmanisi could be regarded as the earliest settlement in Europe and Asia making it a site of international importance.

Tourism Numbers

Considering the major archaeological sites and natural attractions in Kvemo Kartli, tourism numbers are very low. Feedback suggests that quality of engagement on tourism sites, lack of quality accommodation and infrastructure is having a negative impact on potential growth. However, while these inhibitors are being addressed and a focus must be on overnight stay, it must be noted that with such close proximity to Tbilisi, the potential to increase one day visitors must be addressed while maintaining a clear focus on maximizing expenditure.

Accommodation

The current number of accommodation units is 18 with bed capacity of 539. A new five-star hotel is being planned for the region while a project is under way to open a 50 cottage and main wing resort in Dmanisi in 2016, with further accommodation planned for the resort in the years following. While developing new accommodation of all types, including guesthouses is critical for development of the region as a destination, increasing occupancy rates across all accommodation while also maximizing revenue per room is imperative.

The Municipality of Tetritskaro have prepared a new checklist to inventory all tourism attractions within the region (*See Annex 5*).

4. General trends to be considered for tourism development

A SWOT analysis was developed, for the region. To provide background and aid in planning stages, a preliminary inventory of unique produce, dishes, experiences and festivals.

Strengths	**Weaknesses**
Historical background Multinational traditions Culture / Environment Agricultural heritage Unique German heritage in design, architecture and town planning Infrastructure – near the Museum German Hotel, Restaurant Unique discoveries in Dmanisi Imri Pantiani Lake – as a new destination Climate, weather, water	Lack of small guesthouses Poor or no access to soft loans Contaminated environment Lack of motivation Low awareness Lack of trust Lack of capacity building and tourism awareness programmes Limited skills base Toilets Poor accommodation
Opportunities	**Threats**
Informing people on benefits of agro-tourism Information centers Tourism services established New Museum being built in Bolnisi Eco-Cottage resort being built in Dmanisi New five-star hotel being built on outskirts of Rustavi Development of Information Data Base New Project funded by the EU launched – Tourism development: (i) Training guides; (ii) Information brochures; (ii) Supporting establishment of the small guesthouses; (iv) Education, Training, awareness rising, Hospitality ethic Government program in place: building roads, bridges, necessary infrastructure in the region	Poor infrastructure Public transport Limited of access to the internet Waste management Pollution

In ***Annex 6*** it is presented a first Project Concept Note to be part of the Programme on "Sustainable Management of Tourism Opportunities in Tetritskaro Municipality", with the following objectives, and to be financed by UNDP Georgia, Preparation of an Electronic map

of tourist sights and tourist routes in Tetritskaro Municipality, and Installation of Tourist road markers and news banners at the most visited 12 objects.

Strengthening of partnership and cooperation between all players in the value-chain is a bases of the successful and sustainable cooperation (According to the UNWTO one direct employment in tourism creates at list 4 indirect employments though the supply value chain).

Having limited focus on the rural community based eco/agro tourism, major clusters of the tourism activities identified for Tetritskaro municipality are:

- *Ethno-cultural tourism, based on authenticity of the peoples' traditional life-style well preserved in the mountainous villages in combination with historic and religious heritage and traditional wooden architecture of the villages;*
- *Summer Mountain and adventure tourism, based on nature assets, landscape diversity and opportunities to experience various outdoor activities such as: mount-biking, trekking, river white-water sports;*
- *Winter ski-snowboarding riding and ski-touring.*

***Value add chain and distribution of visitor's expenditure (general practices)**:*

Tourism products created by tour-operators/local vendors include all elements of tourism services interlinked to each other as a "value chain".

According to the international experience and local practices the distribution of visitors' travel expenditure along the "chain" is follow:

Components of services rural/agro-nature tourism	Expenditure %	Value per/p in GEL	Delivered by	Needs of investment
Accommodation at Guest house	25%	50	Local	High
Guide-interpreter, outdoor guides.	15%	20	Local	High
Transport	15%	30	National	Moderate
Meal and drink/shopping	20%	40	Local	Low
Souvenirs	5%	10	Local	Moderate
Tour-operator	10%	30	National	Low
Taxes	10%	20	State	Low
Total p. person/day		200		

5. Type of the recommended project intervention

To expect significant economic growth through the community tourism development requires to undertake complex measures in the following areas of intervention:

1. ***Study and inventory of tourism destinations and resources****; as a results elaborate catalogue information about most tangible recourses, define at list one top-market destination place in selected four directions, select contacts of local service providers having pre-conditions to deliver competitive services.*
2. ***Training/capacity building****: Technical support targeted to the capacity building in hospitality businesses, agro-tourism, adventure sports guiding and local tour packaging. Specific subject of the trainings for local gust house owners/small hotels: design and standards of the facilities, basic business planning, hospitality services, promotion using on- line booking platforms, etc.*
3. ***Investment in improvement of establishing of the "destination places" and market the very best****: includes: consolidation of information about sites to visit, plan the trails, define outdoor activities and needed trainings and equipment, use traditional and on-line social media supporting marketing activities; participation in regional tourism fairs (Batumi, Tbilisi), organizing FAM (familiarization) trips for travel operators, outdoor athlete and media team.*
4. ***Support municipal administration and local tourism stakeholders*** *to harmonize tourism development plan and activities with the local development strategy document. Activity plan will serve as a bases of "investment road map" for tourism to be considered for the use of Rural Development Fund of the project.*
5. ***Investment through the small grants for improvement of public infrastructure*** *around destinations, improvement of accommodation facilities and services. Investment through competitive grants program should stimulate local entrepreneurship.*

Activities are clustered into five main groups:

Action 1*: Assessment of Tourism Resources and select destination places for development: Identification of existing tourism sites, trails, define top destination places, critically assess available services, development opportunities and needs;*

Action 2*: Set-up marketing and promotion activities: produce promotional materials to promote the Region and particularly destinations located in the territory of Tetritskaro municipality; elaborate and implement marketing action plan.*

Action 3*: Conduct training and capacity building program in hospitality businesses, outdoor guiding and interpretation services.*

Action 4*: Support in establishment of the local DMO (destination management organization) as executive unit for coordination of tourism initiatives*

Action 5*: Small grants program supporting local initiatives and entrepreneurship by improvement of tourism facilities around destinations: public facilities at the destination places and private properties for accommodation and catering.*

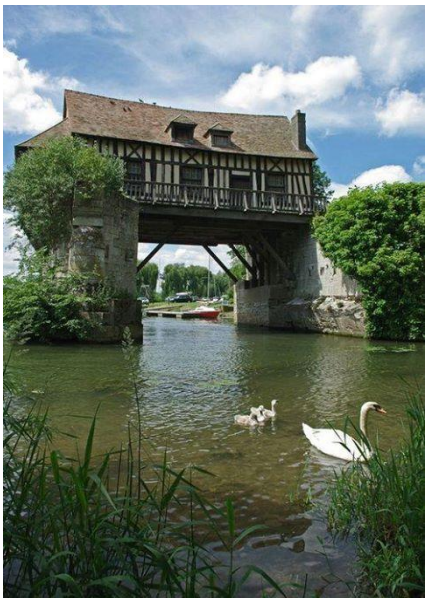
Annexes:

Annex 1: List of the strategic documents reviewed:

1. Local development strategy of Tetritskaro municipality 2018-2022,
2. Kvemo Kartli Regional Development Strategy 2014-2021
3. Georgian National Tourism Strategy 2015-2025; public version/draft.
4. Georgian Tourism in Figure, 2016;
5. Georgia's Tourism in Figure, 2018
6. International Visitor Arrivals to Georgia: April 2018

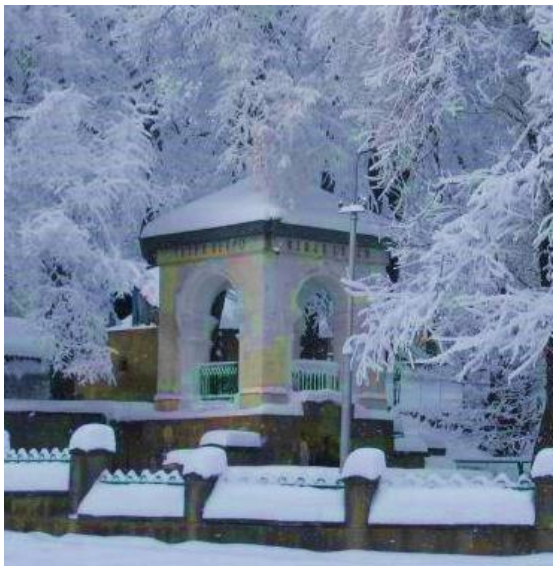
Annex 2: case-examples of the touristic potential in Tetritskaro Municipality

German Village



Tourism attractions in Tetritskaro Municipality

City of Tetritskaro



Recreational zones

Bungalow Manglisi (1,200 sq.m. resort)

Samshlid complex

Annex 3: Examples of entrepreneurship and services in community-based tourism (estimation costs)

Types of local services	**Forms operation**	**Cost p/unit** Standard costs	**Capacity p/unit** Visitors number	**Requirement**	**Reference and examples**
1.Hiking and sightseeing tour	Individual group	25$ p/day	Visitors groups 1 – 6 pers.	guiding experience, Language, safety experience	Common practice in the Region.

2. Mount. Guide and other adventure sports	Individual qualified guide or Tour company	50-150 $ p/day	Group with 1 – 4 guests	Guide certificate in Trekking, biking, rafting, safety conditions, language.	Limited number of certified adventure tour leaders; example of Georgian Adventure leaders school ATS.
3. Transport	Individual, local comp.	50-80 $ p/day	Vehicle – 4 p. Bus – 12 pers.	Safe, comfortable 4 WD vehicle	Business for local owners. Problem is quality and safety of the roads.
4. Catering family business.	Fast food, family meal, Café,	5$ p/meal 15$ p/person full board.	12 – 20 persons	Clean and quality local product, location, offering local and international meal.	Demands are much higher and will increase along the motor-road and at the destination places.
5. Accommodation (private and business)	Huts/hostels Guest house Small hotel	5$ p/night 15$ p/night 25$ p/night	4-12 pers. 4-6 beds. 12 – 20 beds.	Traditional dwelling, land, new building as private house	High request for accommodation, quality of standards and element of authentic architecture needed.
6. Handicrafts	Shop and production,	5 – 15 $ p/visitor	Not limited	Production of crafts	Handicrafts production is low and no shops. There are local crafts producer's association to be contacted.
7. Organization of destination development and cultural events (DMO)	Evening entertainment, songs, dunces, festivals	5$ p/person	Not limited	Performance groups, support from municipality, locations, territories and design commit.	It is most needed and do not require large investment. Calendar of the events should be fixed in advance; 6 to 9 months ahead.
8. Local tour operator or destination management organization.	Initiative group, NGO or local ltd	10 to 15% commission on sale.	Not limited	Local company with qualified staff.	Interesting to be developed to insure sustainability beyond of the project investment.

Annex 4: Potential investment – small grants and contributions per facilities (estimation of costs)

Proposal for extension of businesses	Applicant	Description	Budget * $1000	Investment grant up to	Matching fund	In-kind
Guest house	Individual Family /registered enterprise ltd.	Capacity extension to the 8-10 rooms Facilities includes double rooms with toilet and shower, catering.	35-50	50%	30%	20%
Village house	Individual Family, individual entrepreneur	Guest rooms, share kitchen and dining, simple sanitation	15-25	50%	20%	30%
Mountain Shelter, hostel, hut	Individual, association	Trail shelter, stone or wooden construction, Clean and simple overnight	5 – 15	50%	25%	25%
Catering Crafts shop	Enterprise cooperation	Café/dining	10 – 15	50%	25%	25%
Tourism Promotion centers	NGO / private	Marketing, Training, promotion Guide transport	20 – 30	75%	No	25%

Tetritskaro Checklist

Crt. No.	Question	Yes	No	Additional information	Comments
Flora & Fauna					
1.	Are there any endemic or rare plants in the municipality?	Yes		If Yes, please could you list them, including exact location.	

				See the annex.	
2.	Are there any rare trees or forests in the municipality?	Yes		If Yes, please could you list them, including exact location. 1.Utkhovari (*TAXUS BACCATA*) **specific species, which is spread between the city Tetritskaro and the middle mountain woods.** 2. *Crataegus Pontic* , also known as Kambro, **Only on Vashlovani teritory.** 3. Caucasian Akaki (*Celtis Caucasica*) **As a trees, on the territories of Tondola, Ertisi, Ghoubni, Asureti, Shavakadradi, Sammaldi, Dagheti and Golteti territories from 700-800 m.** 4.*Ulmus*, **spread on the Birtvisi Teritory** 5.*Juniperus Foetidissima* , **in Algeti National Park** 6.*Quercus Macranthera*, **in Algeti National Park** 7.**Walnut tree, almost all over the municipality territory**. 8. *A. Ibericum*, in Algeti National Park and lower mountain woods in Asureti, Ertisi, Ghoubni, Partskhisi. 9.Balamtsara, Algeti National park and lower mountain woods: Ardisubani, Chkhikvta. 10. *Acer Hyrcanum*, on the lower mountain woods in : Golteti, Matsevna	

3.	Are there any rare species of? - Arthropods (insects, scorpions) - Fishes - Amphibians - Reptiles - Birds - Mammals, etc.	Yes		If Yes, please could you list them, including exact location. Birds: *Falco Cherrung*, which is considered to be in Critical Danger (CR); *Neophron Percnopterus* (Reserved areas: Algeti National park and Birtvisi); *Aegypus monachus, Grus Grus and Falco Vespertinus* as endangered (EN) The species included in the Red List of the IUCN. *Orbis, Eagle, Clanga Clanga, and Aquila Helical,* Caucasian Grouse, eagle-owl are included as vulnerable (VU) species. Almost all species are spread in the protected areas: Algeti National Park and Birtvisi territory. - Amphibians : *Triturus vittatus (Ommatotriton ophryticus*) is included in the Red List of the International Union of Nature Conservation, Caucasian Toad and Smaller Frog - Rare varieties (found in the protected areas: Birtvisi, Samshvilde, Algeti National Park) -Reptiles : *Darevskia dahli* and the Mediterranean Turtle (*Testudo graeca*) is a red list of Georgia. The latter is also a vulnerable (VU) variant of the International Union of Nature Conservation (IUCN). Dangerous lizard (Darevskia dahli), *Darevskia portschinskii*, Transcaucasian asp (Protected Areas: Birtvisi, Samshvilde, Algeti National Park). -Mammals: *Lynx lynx* is included as a critically endangered (CR), *Ursus*	

				arctos, Rupicapra rupicapra as endangered species, Caucasian squirrels, European hurricane - *Barbastella barbastellus*, Transcaucasian hazelnut - Mesocricetus brandti, *Go* - *Lutra lutra*, Neringing Bruce, as the species in the red list of the International Union of Nature Conservation (IUCN). Caucasian endemic: Caucasian big, Volkunini small Caucasian big, Caucasian trench (found in the protected areas: Algeti National Park, Birtvisi)	
Water resources					
	Are there any of the following: - Lakes, reservoir - Rivers - Waterfalls - Natural and human-made sources of mineral water - Freshwater springs	Yes		If Yes, please could you list them, including exact location. -Water reservoirs: Tibisi water reservoir Tibisi nearby territory; Marabda reservoir, village Marabda surrounding area; Assyrian water reservoir near the village of Surti; Lipi reservoir – near the territory of the village Lipi, Ivanovka water reservoir Ivanovka. Gokhnari Lake near the village Gognari Buratino Lake, in town Manglisi; Bedena's small lake-bench Cherppanov Lake - Nadarbazi area - Rivers: River Vere, Main Rivers: Algeti and Khrami. Khrami tributaries: torne, pig. Algeti tributaries: Asuretula, Parthtsisi water, Orbetistskali. -Waterfalls: Kldeisi Waterfall (near village Kldeisi), Akhalsheni Waterfall (Kvemo Akhalsheni), ground	

				waterfall - Grounds, waterfalls "Delta" (Tetritskaro), waterfall "Vadapadi" in Assyrian territory. Bogviskhevi Waterfall (Village Dardubani) Mokhvrinave Waterfall (village Saghrasheni) -- Mineral and natural waters - Asuria sulfur, medicinal waters (in the territory of the village of Asuria). - Springs: "Karasu Water" Natural water (river Khrami valley)	
Mountains, volcanoes		**Yes**		If Yes, please could you list them, including exact location. Birtvisi Mountain System (Birtvisi Territory) Trialeti mountain system	
Caves		Yes		If Yes, please could you list them, including exact location. Muguti Cave (river Khrami valley) -Arsena' Cave is located in Algeti National Park, 1 km from Manglisi.	
Specially protected natural areas? - National parks - Protected areas - Natural reserves		Yes		If Yes, please could you list them, including exact location. Protected Areas: Algeti National Park Samshvile Canyon Nature Monument Birtvisi Nature Monument	
Natural monuments? - Geological		**Yes**		If Yes, please could you list them, including exact location.	

- Hydrogeological - Hydrological - Natural historical - Biological			--Historical: Birtvisi Nature Monument, Kldekari, Gokhnari. -- Geological: Sameba mountain (near Thetistskaro), Samshvilde quartzites (adjacent territory of Samshdlia), Bumberazta pavement (Bedenian highland) -Hydrogeology – Kldeisi's natural freezer (village Kldeisi)	
Mineral resources? - Metal - Non-metal	Yes		If Yes, please could you list them, including exact location. polimetal ores in the Khrami valley: copper, gold, lithographic stone in the Algeti gorge with village Abramet, -Non-metals: Basalt (Tsintskaro-Durnuki-Kosalari-Khaishi Territory) and Yellow Tuff (Irak-Nandabazze Territory)	
Dangerous phenomena and risks? **Natural risks** - Landslides, mudflows, rock-fall, accelerating wind **Industrial risks** - Tailings, harmful emissions into the atmosphere or water, radiation, other	Yes		If Yes, please could you list them, including exact location. - Landslides: Golteti, Jorjishvili, Shavkadrakari and Assyrian territory. -Industrial risks - The information is general, not perfectly studied.	
Archaeological? - Fortresses - Towers, observation towers, checkpoints, guardhouses - Cemeteries - Ancient settlements - Ancient graveyards - Cross-stones	Yes		If Yes, please could you list them, including exact location. **Fortresses**: Kldekari (Trialeti Range), Khuluti (Khrami valley), Birtvisi, Partskhisi (village Partskhisi), Orbeti (village Orbeti); Gudarekhi (village Gudarekhi); Samshaldi (Samshdli town); Amlevi	

- Epigraphic monuments, inscribed stones, petroglyphs - Cave-settlements			(village Amlevi); Gudarekhi (village Gudarekhi) **Towers**: Gudarekhi (village Gudarekhi), tower "Salkhino" (village Vashlovani), tower "Erpobari" (Birtvisi); Gostashabishvilis monastery complex tower (village Tbisi); Tanganeti's tower (village Borbalo); Order Tower (Village Samshvilde); **Graves**: Barrows, burial grounds in Village Ivanovka. **Old settlements:** Gokhnari, Samshvlade, Etso, Krtsanisi settlement, Nachichvavebi, Ktsila (Khrami gorge), Old Enageti; **Ancient graves:** The Chkhikvta, Strolls with hand manuscript (village chkhikvta) **The Stone crosses**: stone crosses in the village. Arkhoti, Mamada's Cross, Gudarekhi Kvvjvari, Akhalsopeli, Ksovreti, Saperasheni Kvvvari, Khaishi, Chichvavi, and the Shekhvetila **Epigraphic monuments**: A stone of Abelia church (Abeliani village); Goknari saint The stones of the church of Gori (village Gokhnari), Sioni Sioni and Davit Aghmashenebeli Church (Samtskhedi), Gudarekhi bell tower of the church (Gudarekhi), inscription on the main	

			temple of Gostashishbis monastery complex - Amalov, Akhalsopeli St. The stone inscription of the church of George (village Akhalsopeli); The stone of the Tristan church of the Mother of God. **Stone ornaments**: Fitareti, Manglisi Sioni, Gudarekhi cathedral temples; **Caves settlements**: Mugut's caves, Arsena cave.	
Historical? - Springs, memorial fountains - Mausoleums, chapel-tombs - Monuments, memorial-monuments - Gravestones, tombs	Yes		If Yes, please could you list them, including exact location. **Memorial springs**: Muskhelishvili's spring (in the bottom of Sameba mount) Tetritskaro; "Mironovi", Tetritskar; Varkhuno's spring (Tetritskaro); Supatashvili's (village Tbisi) Buzhghuleti's spring (village Tbisi); "Women's spring" (Algeti national park); Orbeliani's spring (village Mukhati); Nargizebi (village Ertisi); Arsena's(Tetritskaro); **Graves:** German graveyard (village Asureti); Kazakh's; Greek graveyard (village Iraga, Tsintskaro); Heroes graveyard who died at Abkhazian War (town Manglisi) ; 9 brothers Kherkheulidze's graveyard (village Marabda)	

			Grave Stones: Gorkhani's; Akhalsopheli's; Shekhvetila's; Samghereti's; Manglisi's; Tsveri's; Mokhisi's; Zimoniki's; Big Toneti's; Bogvi's; Tskluleti's; Orbeti's;Partskhisi's; Samshvilde's; Abeliani's; Chkhikvti's; Kldeisi's. **Monuments**: Algeti Basilica, Didgori Monument complex, Autumn (Tetritskaro, Didgori street)	
Urban and architectural? - Monastery complexes - Churches - Chapels - Sanctuaries, rock-carved crosses - Bathhouses, guesthouses, oil mills, wine presses, mills, caravanserais - Reservoirs, aqueducts, channels - Roads - Bridges - Buildings - Residential houses	Yes		If Yes, please could you list them, including exact location. Monastery complexes: Gudarekhi monastery complex, village Gudarekhi Fitareti Monastery Complex, close to the Fitareti settlment Pirgebuli monastery complex - Khrami gorge x455374, y4594401 Sabero- village Samgherebi x451171, y4594170 Forty martyr's monastery "Forties" - village Gobubani The church of the monastery complex of the Orsakdreba **Churches**: Evangelical-Lutheran Church - Village Assuria; Abeliani Church Abeliani Church, St. Mikheil "- village Algeti; Savior Church, Mukhiani Church, Trinity Church,	

			Graveyard with Church - Village. Amlevi; Church of the Virgin Mary, St. The ruins of the George Church, Sacred Church - Village Ardisubani; Sameba church, Virgin Mary Church – Village Arkhoti. Virgin Mary and the other three churches - the village. New Zirbiti St.George Church- village new Pantiani, The beard of the beard George - village New pants; Saint George, the Virgin Mary, Peter-Paul churche - Village Akhalsopeli; Saint George Church (ruins) - Village Bogwi; The Church of the Marriage of Borbalo, Takhnaget Church with a tower - village Wheelbarrow Chanting George Church, Church (liparates), St. Mary, St. Barbara Church, The ruins of the church - village. Goon; Vake "Mother of God" Church of the Natakhlari ("Nakalakevi") - Village Goodwill; The Church of Daghestan in the cave, To destroy the ruins of the church,	

			Nasoplar Little Daghest Church, Muguti Church, Saint Nicholas Church and 4 Churches - Village. Sparkle; Village Saint George Church, Armenia, The church of Sioni, Teleti Nishi, Sarchovkhoveli church, Sameba church - Big tone; Saint Giorgi, Church - village Great Iraaga; Saint George Church, Virgin Mary Church - Village The Great Cave Church - village Drawn; Church of Engage Virgin Mary, Church of the Trinity, St. The Church of St. George, the Bay of Peace, the Horse of the Church, the ruin of the Church, the fragment of the Church (Natakhtari), Tsikhia Church - Enagate; Nasoplar Tagnaeti Church - Village Ertis; The ruins of the Virgin Mary Church, Soderovskaya Church - Village. Food; Vashlovani St. George Church, Virgin Mary Church - Village Vashlovani; Saint Barbale Church - Village To visit Church - village Upper Akhalalfa; Virgin Mary Church,	

			Sameba church, Church, The Church of the Thonethels - Village. Charity The church of Diana - village. Alekseevka; Saint Nicholas Church, Ortushua Church Tetritskaro; Abram's mother's son - village Abramite; The Church of Qisla Nasakhlari, Andria Nasakhali two churches, the church of Kosalari, the church of Arnat - Village Kosalar areas (river Khrami valley); The Church (ruins - Abulant and Petriyan) - village Goboon; The church is a small church (ruined) - village. Sixteen Tkemlara Church - Tbilisi 3 km from Tetritskaro Dome Church, Church of Constantine, St. George Church, St. Panaidas Church, St. Paul's Church - Ivanovka Church - village Ipnara; Source code Nino's house Church - village Koda; Mother's Place Church, Little Natvrian Church, St. George Church, Tkalanti Village - Village Kodistskaro; Church - village Lipa; Manglis Sioni, St. George Church - town Manglisi; Matsevani Kviratskhoveli- village Matsevani	

			Trinity Church - Village Mokhisi; Saint George Church, Makhata Virgin Mary's House Church - village Mukti; Church - village Wormwood; Church, The Church, "Demeter" - Village Frail; Virgin Mary Church, Saint George Church, Church - Village Orbetti; Red gospel, Saint George Church Great durnink; Saint Mary's Church, Trinity Church - Village Little Kldeisi; Elia, church - village little Iragara; Tedo St. (St. George's Church) - Village Little cliff; Church - village Singing; Church - village Upper Akhalsheni Salsi's Sioni, Samshlid's Church, David Aghmashenebeli Church; Samshladi Fortress 3 Outdoor Church - Samshdli's Town; Church of Krtsanisi Church, St. Giorgi Church - Krtsanisi settlement; Saint Trinity Church - Village Sapudzvrebi;	

			The Church of Ninikanda - The Village Saghrasheni; St. George's Church, Church, St. Marine Church, Virgin Mary Church - Village TBISi; The Savior Church - the neighborhood of Birtisi; Dark Khevi Church - near the Monastery of the Fitareti; Church of the Mother of God, Church Nest, Cornel Stone, Church - Village Lower Akhalsheni Saint George Church - Village Lower Akhkalafa; Kothish Church - Village Choke; Church of the Virgin Mary (ruins), Soderovskaya Church, Virgin Mary Church, Gate of Gori Church - Village Ghvevi; The Cross of the Cross of Christ, Saint St. Mary's Church, Sorghoskhoveli Seer Church, St. George Church - Village Goboon; Shavakadkhar Church - Village Shaky; Trinity Church, church saint George - village Shamta; Saint Mary's Church, Mother of the Virgin Mary - village Shekhvetila; 2 churches - village Shikhilo; Saint George Church, Sameba, Church, "Sioni" Saginashvilis Door Church, Church, "Green Monastery" Church "Muguta Sakhari"	

			Village Chkhikvta; Saint Marine Church - Village Marabda; Saint George Church, Mother of God, - village. Tsintskaro; Dumanisi's Virgin Mary, The Cross church of mount, Saint St. George's church - village cross; Ugudeti church near the village of Ugudeti Shrine - Ujjina Tkhinvala area, **Chapels**: Mosque (village Kosalari) **Reservoirs**: The ancient pool of water collector (Trialeti ridge with the Kldekari fortress), the ancient pool of water collector (Birtvisi), **Water pipelines**: Tibisi-Kumisi irrigation highway **Channels**: Irrigation channel of Krtsanisi, Tibisi-Kumisi irrigation channel **Temples**: Marani (village Asureti) **Residential Houses**: **Residential Houses with Slavic Architecture** Tetritskaro, George	

			Brtskinvali and David Aghmashenebeli streets; **Residential houses with Slavic architecture** - town Manglisi, residential houses with German architecture - village. Asureti (Shvabis Street) **Roads: see appendix 2** **Bridges**: Bridge of Samshvilde (river Chichvavi), Partskhisi bridge(river.Partskhisiswyali; Iraga Bridge (river Torne), Chichvavi Bridge (river Chichvavi), Railway Bridge (Tetritskaro), Shekhvetila bridge (river Algeti) Manglisi Bridge (Algheti River), Algeti Bridge (Algheti River); Railway Bridge (Village Khaishi); Marabda - Kothish Bridge (river Algeti), Asuria bridge (river Asuristskali), Ipnari Bridge (river Torne)	
Monumental art? - Memorials - Sculptures, busts, open exhibitions of modern sculptures - Museums, etc.	**yes**		If Yes, please could you list them, including exact location. **Memorials of the dead in World War II:** (Tetritskaro, town Manglisi, Villages: Algeti, Akhalsopeli, Asureti Enageti, Shasvakdari, Borbalo, Vashlovani, Dagheti, Samshvilde, Great Durnuki, Little Durnuki, Great Thoneti, Little Iraaga, Alekseevka, Ivanovka, Koda, Chkhikvta, Matsevani, Ksovreti, Jvara, Samgheti, Shikilo, Tsintskaro, Georgia, Ardisubani)	

				The memorial of the dead in the war in Abkhazia (village of Surat), memorial of Vladimer Davitashvili, who died in August war Memorial (Village Partskhisi), memorial of heroes fallen for Georgia's territorial integrity (borough Manglisi; so called "little rose") **Memorial of Didgori** (Didgori Valley), 9 Brother Kherkheulidze Memorial (entrance to village Marabda) Memorial of April 9 (Tetritskaro) Busters: Thoneti - Vazha Pshavela; Village Marabda - Arsen Odzelashvili; Village Koda - Vasil Barnovi; Village Georgiashvili -Arsena Jorjiashvili; St. Tetritskaro - Ivane Demetrashvili and Sergo Grigoryan; Monuments: Shota Rustaveli (village Asureti); Museums: Local Museum (Tetritskaro), Jorjiashvili Museum (Village Jorjiashvili); Mosaics: (Tetritskaro, village Abrameti)	
Are there any days/holidays, which are celebrated in the Municipality IN A SPECIAL WAY?					
	Holidays (national, religious, specific to the village, other)	Yes		If Yes, please could you list them, including exact period and location. **National holiday**: Didgoroba (August 12 - Didgori Valley) **Public holiday** (city celebration): Garisoba - First Saturday or Sunday of October - Tetritskaro); Marabda (1 July - village Marabda; **Religious**: Pitaretoba (4 December - Pitareti Monastery); Gudarekhi	

				(September 21 - village Gudarekhi); Novruz Bairam (March - village Kosalari, village Samgheti, village Shikilo); Vardaravi (8 July - village Samshlade, village Durnuki and other Armenian settlements) **Specific to the village**: Kosalaroba (August 14 - village Kosalari)	
	Festivals	No			
	Anniversaries	No			
	Special days for the village	Yes		Kristejvroba (20 May- village Ghoubani)l Eliaoba (1 August- village Iraga)	
	Other				
What traditional and/or entertainment events are held in the Municipality?					
	Traditions, rituals	Yes		If Yes, please could you list them, including exact period and location. **Lamproba** (February - village Tsintskaro, village Khaishi, village Golteti and other settled villages eco-migrants) **Sameboba** (3rd day after **Chiakokonoba** - Sameba mountain, Tetritskaro); ChiaConkonoba throughout the municipality (Easter Week Fourteen); **Tskalkurtkheva** - January 19; **Chona (starts on Easter Sunday of the Red Friday)** **Lazarus** (during the drought and abundant rainfall) (village Vashlovani, Ertisi, Ghububani) **Alilo** - 7 January;	

				Lifane (Day of the Soul of the Souls - Svani Populated by Eco-Migrants)	
	Exhibitions, fairs	No		If Yes, please could you list them, including exact period and location.	
	Concerts, performances	Yes		If Yes, please could you list them, including exact period and location. People's Event (Tetritskaro), May 26 Event dedicated to Independence Day (Tetritskaro), June 1 - Concert dedicated to Children's Day (Tetritskaro) A concert dedicated to the celebration of the Didgoroba (August 12, Didgori Valley) Garisoba (Tetritskaro, October) Marabdoba (July 1, Marabda Valley).	
	Other			If Yes, please could you list them, including exact period and location.	
Use of the gifts of nature					
	Are there any wild fruits, berries, mushrooms or herbs around the municipality that the people gather?	Yes		If Yes, please reply to the following questions: - What time of the year are they available? - How common is gathering those plants among the villagers? -Wild fruit: shingle, pants, mellitus, macula (autumn) strawberries, blackberry (summer) Mushroms: mchada, tsetsero, shavchokha, zeta, manchkvala, the population gathers in spring and autumn.	

				Plants: satatsuri, koprchkhilo, ghandzili, ghima, mshauna, (Summer, autumn) Medicinal plants: Medicinal plants: chamomile, nettle, threshold, krzana, ashly (summer, autumn).	
	Are there any amateur fishing areas?	Yes		If Yes, how fare are these areas from city? - fishing grounds: Tbisi reservoir (village Tbisi) Foodstuff Restaurant "Admiral" - MD. Algeti, village Tbisi.	
What dishes/beverages are specific to the village and are there any related rituals? Please list them below:					
	- **-**			**Dishes**: Ghimis Tsmindi, Gholos Shechamandi, Cornel Shechamandi Mtiuleti's Khada Drinks: "Shala" Asurian black, georgian whisky Holidays related: Preparation of the Khinkali on Tskalkurtkeva day, on Easter – boiled butter's Khadas.	
What arts and crafts are common in the village? Are there any skilful masters, talented artists, whose works may be of interest for tourists?					
	Woodworking, cross-stone making, carpet making, needlework, sculpture, painting, pottery, blacksmithing, other	Yes		If Yes, could you please give more information on these artists? Woodworking masters: (Zakro Gigauri, Mevlud Charxeliani, Tetritskaro), Traditional Azeri carpets (village Kosalari), sculptor (Irakli Bajiashvili - village Koda), artists: (Omar Chitladze, Gela	

				Midelashvili, Tatia Bakuradze, Ia Arsenishvili), Ceramics (Otar Sharabidze), Mtsdeleli (Levan Metreveli's office in Asureti), municipality free of charge knitting, quilt, tapestry, cutting-off A, embroidery and enamel (st. tetrickaro village. Koda, Manglisi village. Assyria).	
	Song, dance, music, performances (prominent folklore ensembles, individual performers, musicians, minstrels, tightrope walkers, other)	Yes		If Yes, could you please provide more information on these artists? Elders' Folk Ensemble "Didgori", Folk Ensemble "Gudarekhi", Choreographic Ensembles - "Trinity"; "Didgori"; People's makers - Zakro Gigauri, Rezo Tsiklauri, Maia Gogadze, Avto Chokheli, Robert Manukov, Shota Aptsiauri. Poets - Gela Medelashvili, Emzir Amurvelashvili, Nana Tsiklauri, Ia Noneishvili, Amiringo Chegiani, Vasil Bekauri, Tamaz Aptsiauri, Manana Otinashvili, Kako Bedoidze, David Badalashvili, Pianists - Zurab Kobakhidze, Tamar Midelashvili, actors - Gocha Aptsiauri, Tedo Bekauri, David Bekoshvili , Vasil Amurvelashvili	
Are there any residents in the village that can be of a special interest for the guests?					
	Healers, fortune tellers, other	Yes		If Yes, could you please provide more information on them? People's healer - village Samghereti	
Are there any interesting stories related to the village or its surroundings, which the locals can tell the guests?					
	Villages history, etymology of the name, stories related	Yes		If Yes, could you please provide more information?	

	to the surrounding places of interest and nature			**History** - Didgori, Marabda, Garrisi, Samshvilde, Pharkhisi, Vazha Pshavela's Activity in Toneti Public School, History of Ana Baji, Tamar Vashlovneli (historical character) from Vashlovani village, history of Arsena Marabdeli and nine brothers Kherkheulidze, Pirghebuli Monastery Complex - Prince's Residence, Nadarbazev's History – Tamar's Summer Residence, Caben monastery complex - Queen's approximate whereabouts of the last visit in Tetritskaro, History of the Khuluthi castle, history of Kldekari Baghvashi's, Assyrian (Elizabethtali) and Manglisi (the first episcopa in Georgia) history of Tetritskaro in Georgia. **Name etymology and interesting news related to the place:** Varkhuno- Verkhviani Tskluleti, Kldeisi Orbeti Chkhikvta Shavsakdari Samghereti Manglisi Didgori Partskhisi - shield fortress	
Would you please tell what cultural entertainment options you have in the Municipality?					
	- Theatre, cinema, gallery/museum, concert hall, cultural center	Yes		If Yes, could provide more information on the name and status?	

	- Any other option not mentioned?			Cultural-entertainment spaces: Local Museum (Tetritskaro) Orbeti green space (village Orbeti) Youth Center (Tetritskaro) Cody Community Education Center (Soc.) Tsintskaro Community Foundation Theaters: Children's Theater "Garis" (Tetritskaro) Children's Theater "Iebi" (Tetritskaro) Cultural Centers: Tetritskaro Cultural Center, Art and Musical Schools (Tetritskaro, town Manglisi) Eredvi municipality. Cultural Center (Village Koda) Amphitheaters (Tetritskaro, Boris Manglisi, Didgori, Bear Forest)	
What kind of active leisure options do you have in the village?					
	• Hiking routes • Winter sport facilities o Skiing /snowboarding routes, ice rink, ice climbing routes, other • Water sport and leisure facilities o Swimming pool, water attractions, other • Extreme leisure options o Rock climbing, zip-line, other • Hippodrome	Yes		If Yes, could provide more description and distance from Municipality? -Confine paths: Birtvisi Nature Monument Shekhveetila-Kldekari Algeti National Park Pirghebuli (river Khrami gorge)	

	• Is there anything else that was not mentioned?				
Are there any evening pastime options in the village?					
	- Pub / wine house, bar, cafe, disco club - Anything else that was not mentioned?	Yes		Caffe “Amalia”, Tetitskaro	

Support services and infrastructures

Would you please tell whether the following are available in the municipality and its surroundings or not.

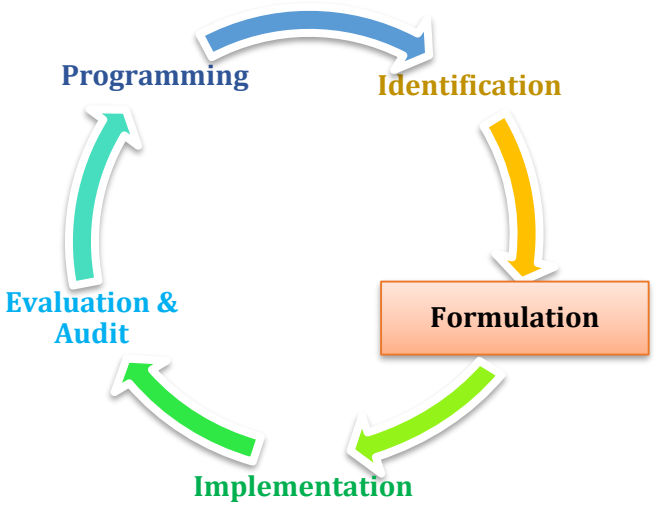
	Number in the Municipality	**Notes**	**Number in villages** (mention the distance)	**Notes**
Lodging				
Hotels	2		Hotel "Elite" (village Bogvi, 11 km from municipality center) Hotel "Kakhaberi" (located in Tetritskharo) Pantian Sports Complex (village Pantiani, 45 km from center)	
Guesthouses / B&Bs	4		"Artist's House" (located in White Square) Manglisi Family guesthouse "Gocha Dolidze" (located in Manglisi, 35 m from the center of the city) Guesthouse "Asureti" (located in the village of Asureti, munc.17 km from the center) Guest House in Village Alekseevka (at 15 km from the center)	

Hostels					
Houses/rooms for rent			Daily rented houses in a small town in Manglisi - 40 houses.		
Camping	3		Camping Places: "Asureti Camp" (village Asureti) Algeti National Park Birtvisi Protected area		
Dining					
Restaurants/food points	7		Restaurant "Elite" (village Bogvi, 11 km from the municipality center) Restaurant "Admiral" in the village Tbisi, muni. 10 km from the center) Troutery "Algeti" (10 km from the center of the village Tbisi,) The Partskhisi restaurant (village Partskhisi muni 8 km from center) Pantiani restaurant (village Pantiani, 45 km from the center) Jorjiashvili's restaurant (village Jorjiashvili municipality at 12 km from center) Restaurant "Bachia"		

			Tetritskaro		
Family dining			Guest house-dining village In Alekseevka (at 15 km from the center)		
Other			Agricultural Production Markets: city Tetritskaro Village Jorjiashvili Village Dre town Manglisi		
Stores/trade points					
Food			None		
Non-food			Municipality markets.		
Tourism support services					
Information center			none		
Tourist accessories (for sale/rent)			Koda Community Education Center (Village Koda) The Art School (Tetritskaro)		
Tour guides			Certified guides-2 (Ia Arsenishvili, Tetritskaro, Luka Dolidze, Manglisi)		
Transportation					
Taxi services			10 (private taxis) Tetritskaro 10 (private taxis) village Tsintskaro 5 (private taxi) village Koda		
Rent of means of transportation (car, bicycle, boat, horse/donkey, other)			Horse Rental: Horse riding base of Ghvevi, Administration of Algeti National Park (town Manglisi) Village Jorjiashvili Bicycle rental: (Tetritskaro)		
Gas station			none		
Petrol station					
Bus stop					
Ropeway			none		

Other infrastructures					
Currency exchange points	3		"Liberty Bank (Tetritskaro, Koda, Boris Manglisi) "Bank of Georgia" (Tetritskaro) Credo Bank (Tetritskaro)		
ATMs (*indicate the bank*)			"Liberty Bank (Tetritskaro, Koda, Boris Manglisi) "Bank of Georgia" (Tetritskaro) Credo Bank (Tetritskaro)		

Chapter 3: Project Formulation, Appraisal & Approval Phase



PHASE III. PROJECT FORMULATION, APPRAISAL & APPROVAL

The aim of this phase is to assert the **feasibility of the project ideas** outlined during the project identification phase. This may involve further research into the people affected by the problems that the project aims to address and how these problems affect them. This phase includes **filtration and appraisal** (evaluation of the project idea against a specific set of criteria) as well as undertaking a **pre-feasibility study and/or a feasibility study.**

It equally involves the identification of possible **risks** to the project from external factors and how to address them. Based on this a **detailed project design** should be prepared (**Terms of Reference**) including management arrangements, the ways we will **measure project performance (through monitoring**) and **impact (through evaluation**), financing plan, cost-benefit analysis and funding proposal.

This phase also comprises the development of a so-called "**Logical Framework Matrix**" outlining the **overall objective** of the project, the project **purpose/outcome**, the project **results/outputs** and proposed project **activities**. To this is added the definition of **criteria/indicators** that will serve as a basis to monitor the project during its implementation and the **sources of information/verification** for these criteria.

Once a potentially "fundable" project has been identified, and the **Project Concept Note (PCN)** has been reviewed and accepted by the sponsoring Government and financing entities, the project enters the Project

Preparation stage. During Project Preparation, the entire project is subjected to a more detailed analysis of the project's overall feasibility, given the strategic context.

In order to begin the Project Formulation, Assessment & Approval phase, the project designer should begin with the PCN described under Phase II (in Chapter 2). If the PCN was fully and thoughtfully completed, then the detailed preparation of a more elaborate project design worthy of final approvals and financing should be a relatively straightforward, albeit intensive and time-consuming, process. If, on the other hand, the proposed project intervention is too small there may be little change as a result and the impact of the project may be insignificant. It is important to decide on how large or small the project should be, particularly where there may be limited finances available, or other restrictions in resources.

At the end of this phase the project designers should have a clear idea about the scope of the project which will influence later budgeting and other project management approaches.

The primary focus of this project phase is "**feasibility**". It is important to demonstrate that the project design is feasible in terms of its effectiveness and efficiency. To demonstrate feasibility, additional information to that contained in the PCN is required, such as:

- More specific and measurable indicators on expected project results;
- Preliminary technical designs for each of the project components;
- Additional information on legal and institutional constraints that may impact the project;
- More detailed feasibility information related to the issues identified in the PCN (technical, economic, financial, environmental, institutional and social);
- A more rigorous specification of potential project risks along with plans for their mitigation;
- Information for effectively communicating the project design to key stakeholders and other sponsors to assure their continued buy-in to the project.

Source: Project Management Toolkit, South Eastern Europe Regional Infrastructure Program for Water and Transport, Booz, Allen, Hamilton, USAid, January 2003).

Key **outputs** of this phase are:

- ✓ **Pre-Feasibility Study;**
- ✓ **Feasibility Study;**
- ✓ **Environmental and Social Impact Assessments;**
- ✓ **Project Appraisal report;**
- ✓ **Terms of Reference including detailed project design;**
- ✓ **Terms of Reference for procurement of services and goods;**
- ✓ **Tender Documentation;**
- ✓ **Financing Agreement;**

3.1 Pre-Feasibility Study

The purpose of the Pre-Feasibility Study is to provide an analysis of general situation around a proposed project in order to assess whether it is worth pursuing.

The Appraisal stage aims to **define whether a project has a real prospect for success**. An initial project idea undergoes an appraisal process, sometimes referred to **as pre-feasibility study** to be followed by a comprehensive feasibility study if the result of the appraisal process is satisfactory.

The purpose of the Pre-Feasibility Study is to provide an analysis of general situation around a proposed project in order to assess whether it is worth pursuing.

Projects are appraised at different stages in the project cycle:

- **Following the initial identification**, at the moment a decision has to be made on whether to continue with the identified project into the Formulation/Planning Phase;
- **Following the Formulation**, when a decision has to be made whether to present the project for funding;
- **After the tendering of the approved project**, when the project proposals of the tenderers are assessed;

The outline of a typical **Pre-Feasibility Study for an Infrastructure project** can look as follows:
1. Introduction
2. Description of project area
3. Technical Parameters
4. Environmental and Social Parameters
5. Financial and Economic Parameters
6. Stakeholders
7. Risks and Barriers to Project

Table 10 Project Pre-Feasibility Study Main Sections

3.2 Feasibility Study

The feasibility study looks at the proposed project's overall viability and is done by using data and information collected during the identification phase. In other words, it is a way to find out whether a project is feasible before starting to invest resources in it.

The Feasibility Study is completed before the project is initiated and is frequently used to assess the possible effect of certain processes and procedures on the results of the project.

Example of What to Include in a Project Feasibility Study

- ✓ **Project Description** (project name and purpose, stakeholders, expected results)/**project database**;
- ✓ **Goals;**
- ✓ **Timeline;**
- ✓ **Costs and Budgeting;**
- ✓ **Purpose;**
- ✓ **Resources;**
- ✓ **Project process including flow charts;**
- ✓ **Management and Teams;**
- ✓ **Observations;**

Table 11 Project Feasibility Study Main Sections

3.3 Appraisal

At this stage, also referred to as the **Planning Stage**, technical and financial appraisals are undertaken in order to review the technical and financial requirements and to determine whether the project will be eligible for funding. The resulting **Appraisal Report** should include the **logical framework matrix, the feasibility study** and should assess the proposed project according to the following **criteria**:

Relevance *The project is relevant when the project purpose contributes in a meaningful way to the overall objective;*

Effectiveness *When it is highly likely that project results will be achieved by the implementation of project activities, and that the implementation of the project results will lead to the achievement of the project purposes;*

Efficiency *When it is likely that the relation between activities and resources is fair and realistic;*

Feasibility *When the assumptions and risks at activity and results level are realistic and acceptable;*

Sustainability *of the project depends on many factors. Questions that may be asked are:*

- ✓ *Does the project enjoy the policy support from the local authorities?*
- ✓ *Will the environmental conditions remain the same as before once the project is finished?*
- ✓ *Is there a local organisation of which the project can be part once it is finished?*
- ✓ *Is there any sense of ownership of the project by the beneficiary?*
- ✓ *Is the financial and economic benefit of the project such that it outweighs future costs and expenditure?*

3.4 Terms of Reference – Project Design

The drafting of the Terms of Reference (ToR) for the project constitutes the ultimate step before the tendering/procurement process starts. It is very important that the ToR be as

detailed and comprehensive as possible since it will also serve as a basis on which the project contract will be based. Standard project Terms of Reference should contain the following information:

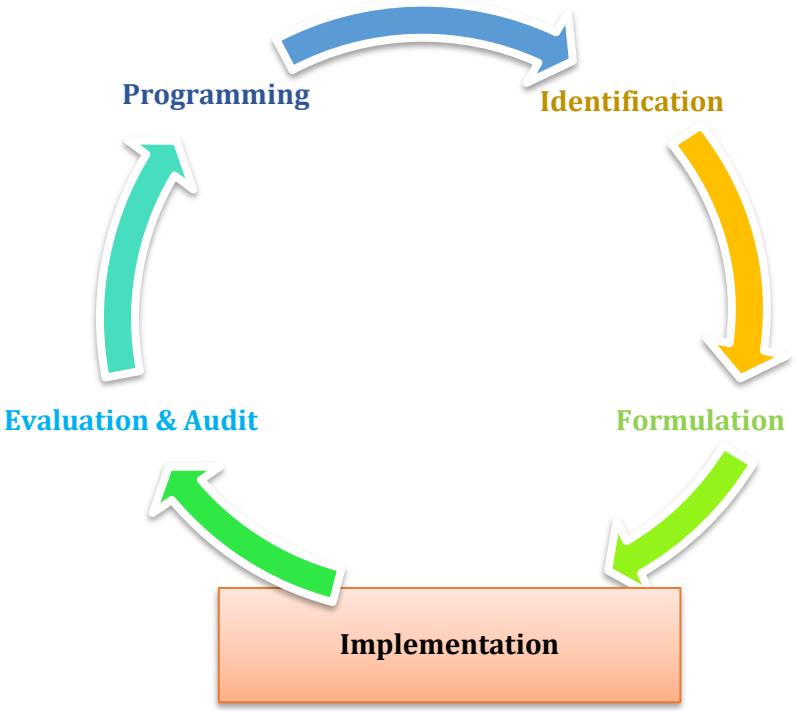
Terms of Reference General Template

Background	✓ *Provide an overview of the municipality behind the proposed project* ✓ *State the general role of stakeholders in doing project activities* ✓ *Write a brief explanation of the need behind the project*
Objectives	✓ *State the major objectives of the proposed project intervention* ✓ *Describe the intended achievements to be gained* ✓ *Provide an overview of the resources required* ✓ *Clearly identify and define what is expected from the project and who the target audience is*
Issues	✓ *Highlight the key issues to be reviewed* ✓ *List the criteria (including Efficiency, Relevance, Effectiveness, Impact, Sustainability) against which the issues will be analyzed and evaluated*
Methodology	✓ *Define the key phases of the implementation process* ✓ *Specify the required level of stakeholder involvement* ✓ *Describe the content and duration of project activities* ✓ *List the information collection tools necessary for monitoring purposes* ✓ *Provide data analysis rules*
Expertise	✓ *Specify the type of work involved in the proposal* ✓ *Describe the type of skills and abilities required* ✓ *Define the exact number of individuals involved* ✓ *Clarify the period of engagement of each team member* ✓ *Describe the duties and responsibility per teammate* ✓ *Identify the relationships between the team members*
Reporting	✓ *Provide the Table of Contents for project reports (as appropriate)* ✓ *Add report templates as appropriate* ✓ *Set submission dates* ✓ *List the computer software programmes to be used for report writing* ✓ *Refer to people responsible for reporting and approving* ✓ *Provide other sufficient information such as number of copies to be created, responsibilities for report production and presentation, etc.*
Work plan	✓ *Provide a summary of the anticipated work* ✓ *Describe the activities and necessary resources required for achieving the project's results and purpose* ✓ *Provide the activity schedule template* ✓ *Describe The finance resources allocated to the project*

Table 12 Project Terms of Reference (TOR) (general sources, among others my.management.guide.com).

See Annex 5 for more examples of different Terms of Reference (ToR), notably for procurement.

Chapter 4: PROJECT IMPLEMENTATION Including MONITORING & REPORTING PHASE



PHASE IV. IMPLEMENTATION INCLUDING MONITORING AND REPORTING

The purpose of this phase is to **deliver the results and contribute to the overall objective** of the project. It also involves the management of the resources available for the project as well as the **reporting** on project progress and the **monitoring** of project activities.

During the implementation of the project it is important to monitor and review the progress of the project and any outside changes that affect it. The project plans should be adjusted where necessary. The identification of key '**Milestones**' to check on project progress assists in the effective management of the project. Monitoring as such serves to measure the **efficiency** and **effectiveness** of the project and its activities.

Input to the Implementation and Monitoring Phase includes: Terms of Reference and detailed design, tender documents and financing agreement, Logical Framework matrix including indicators and sources of information, activity and work programme, resource and budget allocation and schedules, risk management matrix, contractual documents, project implementation plan.

This phase follows naturally from the preceding phases and is the beginning of the **Project Management** process. The Activities identified in the previous steps have to be fully

evaluated and costed, with appropriate **allocation of resources** and a realistic **assignment of time and man-power**.

The end product of the Implementation Planning stage is the **Project Implementation Plan (PIP)**. The PIP contains detailed information on the Project Scope, Description and Financing Plan, proposed Implementation Arrangements, the Implementation Plan, the Monitoring and Evaluation Plan, and a Related ToR.

Key outputs of this phase are:

- ✓ **Project Implementation Plan;**
- ✓ **Gantt Chart;**
- ✓ **Milestone Chart;**
- ✓ **Project Inception Report;**
- ✓ **Project Progress Reports;**
- ✓ **Project Supervision Reports;**
- ✓ **Project Final Report;**
- ✓ **Delivery Acceptance Certificate;**
- ✓ **Terms of Reference for procurement of services and goods (construction, supervision etc);**
- ✓ **Project Monitoring Plan and Reports;**

See Annex 6 Project Implementation and Monitoring Tools

There are many Management software packages that can assist in these calculations, including the simpler work-plans such as Excel, or more complex programmes such as Microsoft Project. There is no single "perfect" software programme and any approach can be applied so long as there is clarity on the resources necessary, and consistency in applying the variables **Time, People, Materials, and other Resources**.

This phase should finish with a **completed work plan**, fully costed and with appropriate allocation of resources. It is also useful to identify on the work-plan the key stages of the project activities as these will assign the project manager to monitor progress.

4.1 Project Activities & Resource Planning

4.1.1 Start of Project Implementation

Following the procurement and tender procedures, the signing of the **contract** marks the beginning of the **project implementation phase**. This means that the **Project Plan, the budget, the technical proposals have been approved and the contract signed.**

The main implementation steps are:

1. **Project Work Plan**. Tasks are broken down into **milestones** or **targets** which should help regular reporting and monitoring.

2. **Scheduling of Activities:** The scheduling of project activities may include a budget.

4.1.2 Work Planning: GANTT Chart

The GANTT Chart is a detailed timetable of activities which records what activities are planned and their intended completion dates. It is named after Henry Gantt who was an engineer and a management consultant. His management theory **combines the work that has been done with the work that still needs to be completed**.

When GANTT Charts are used to schedule projects, the project manager should continuously modify the chart as the project progresses. The charts can be made more complex by displaying what specific resource is required to perform an activity. Programmes such as Microsoft Excel make the creation of a GANTT chart considerably easier.

Milestones are points defined by the project manager that **mark the completion of an important stage in the project's life**. They are usually used as **an indicator** of whether a project is running to schedule or not, and as a measure of how complete a project is. If the project is not on schedule, the GANTT chart allows you to easily identify what actions need to be taken in order to put the project back onto schedule.

An essential concept behind project planning is that some activities depend upon other activities being completed first. For example, it is not a good idea to start building the walls in an office block before you have laid the foundations. Nor is it a good idea to put the cake mix into the tin without greasing the tin first.

These are dependent activities, which need to be completed in a sequence, with each stage being more-or-less completed before the next stage can begin. We can call such **dependent activities** '**sequential**'.

Non-sequential activities are not dependent on the completion of any other tasks. These activities may be done at any time before or after a particular stage in the project is reached. These activities are called are **non-sequential or "parallel**" tasks. This concept based on Sequential and Non-sequential activities is referred to as a **Critical Path Analysis (CPA).**

To summarise, Gantt charts can:

- Assist in identifying the tasks and sub-tasks to be undertaken;
- Help you lay out the tasks that need to be completed;
- Assist in scheduling when these tasks will be carried out and in what order;
- Assist in planning resources needed to complete the project;
- Assist in working out the critical path for a project where it needs to be completed by a particular date;

One of the key points of the Gantt Chart is that every activity has a separate line. It makes possible the creation of a time-line for the duration of the project. Normally it is practical to use weeks, or for very big long-term projects, months, but there may be some occasions when you want a very detailed work plan, and it may be that you adopt a daily chart.

Although GANTT charts are useful and valuable for small projects that fit on a single sheet or screen, they can become quite unwieldy for projects with more than about 30 activities. Larger GANTT charts may not be suitable for most computer displays. A related criticism is that GANTT charts communicate relatively little information per unit area of display. That is, projects are often considerably more complex than can be communicated effectively just with a GANTT chart.

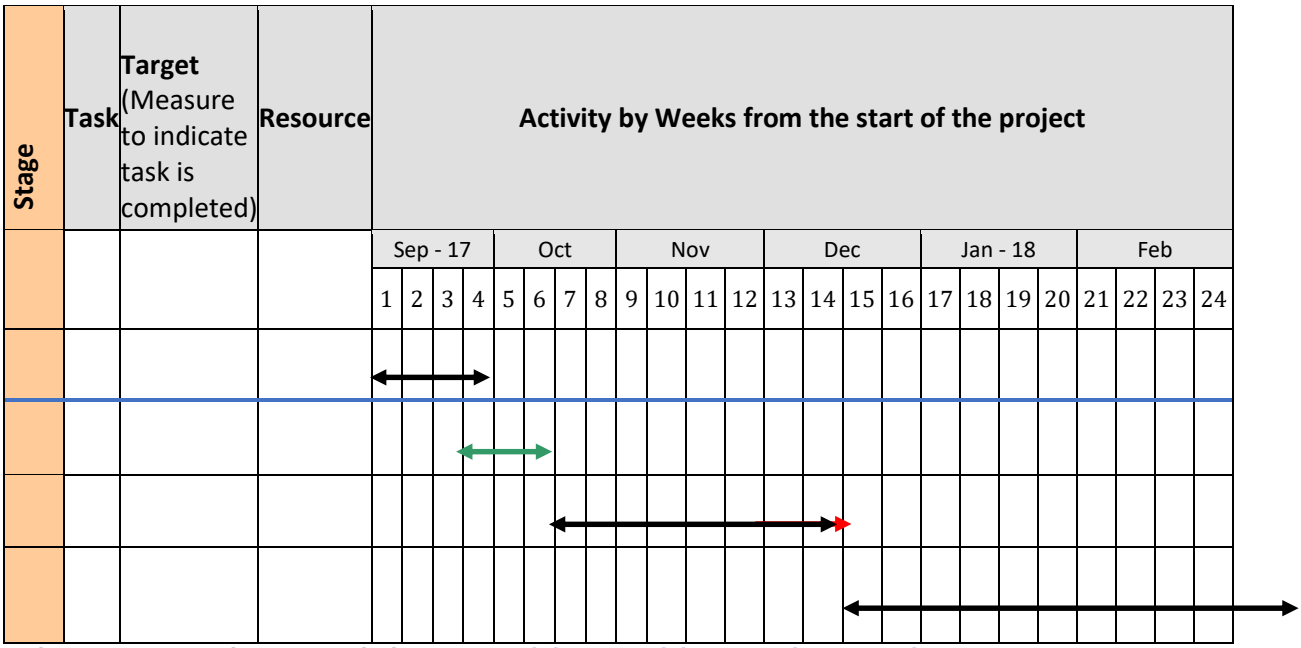


Figure 7 GANTT Chart Example (*Source: Training material PCM project expert)*

See Annex 6 Project Implementation and Monitoring for more examples of Project Planning Tools.

4.2 Project Monitoring

Monitoring is a continuous activity, the purpose of which is to provide feedback on the project intervention to project management and stakeholders in the form of an ongoing assessment or project progress or lack thereof.

The Aim of the Project Implementation Phase is

- ✓ to deliver the results;
- ✓ to achieve the project purpose;
- ✓ to contribute to the overall objective;

- ✓ to manage available resources efficiently;
- ✓ to ***monitor*** project progress;

***It usually takes place in three periods*:**

I. Inception period → *Inception Report;*

II. Implementation period → *Project Progress Reports & Project Monitoring Reports;*

III. Completion period → *Completion/final Report;*

Monitoring measures project progress by checking whether the activities of the project lead to the intended result/outputs, and whether these results lead to the desired project purpose/outcome. In other words, it provides an ongoing and continuous assessment of the way that the project is being implemented.

The indicators (see **Section 2.4.4**) defined as part of the project logical framework matrix are used to **measure project progress** and to **assess the achievement of the project results and project purpose**.

- ➢ **Monitoring measures project Relevance, Efficiency and Effectiveness;**
- ➢ **Evaluation (*see PHASE V - Evaluation*) also measures project Impact and Sustainability;**

Monitoring **supports the decision-making process** in that it provides a **warning system which enables the correction of the project implementation process** in case the project is off track. By doing this it ensures the **accountability** of the project implementation process and serves as a **basis for the future evaluation**.

Monitoring & Evaluation Criteria

Project Relevance

- ✓ Appropriateness of project objectives to the problems that it was supposed to address;
- ✓ Appropriateness to the physical and policy environment within which it operates;
- ✓ Assessment of the quality of project preparation and design, i.e. the logic and completeness of the project planning process, and the internal logic and coherence of the project design.

Project Effectiveness

- ✓ Assessment of the contribution made by results to achievement of the Project Purpose, and how Assumptions have affected project achievements;
- ✓ Assessment of the benefits accruing to target groups;

Project Efficiency

- ✓ The fact that the project results have been achieved at reasonable cost, i.e. how well inputs/means have been converted into Activities;
- ✓ Quality, quantity and time, and the quality of the results achieved.

Project Impact

- ✓ The effect of the project on its wider environment;
- ✓ Its contribution to the wider policy or sector objectives (as summarised in the project's Overall Objective);

Project Sustainability

- ✓ Assessment of the likelihood of benefits produced by the project to continue to flow after external funding has ended;
- ✓ Factors of ownership by beneficiaries, policy support, economic and financial factors, socio-cultural aspects, gender equality, appropriate technology, environmental aspects, and institutional and management capacity.

Source OECD/DAC (www.oecd.org/dac/evaluation)

4.2.1 Monitoring Tools and Monitoring Process

Monitoring is carried out by using **Monitoring Templates.** The monitoring templates are usually based on three documents:

1. The **Terms of Reference** which identified objective and purposes to be achieved by the project;
2. The **Work Plan/Activity Plan** which identifies activities and results/outputs;
3. The **Logical Framework** which identifies achievement indicators;

Other project documents which can serve as a basis for the monitoring process are

a) Project Inception Report;

b) Project Progress Reports;

c) Project Final report;

Monitoring templates should be easy to use, understandable and adapted to the circumstances. They should allow for recommendations for specific action to be taken (***See Annex 6 Project Implementation and Monitoring*).**

The **Monitoring Process** usually begins with a **Desk Study** during which the person undertaking the monitoring studies all the available project documents, such as:

- Terms of Reference;
- Detailed Design;
- Terms of Reference Construction;
- Inception Report;

- Progress Reports;
- Logical Framework Matrix;
- Work Plan;

The monitor should also, in advance, **identify other project stakeholders** and recipients of the project (apart from the direct beneficiary/client).

It is useful if the monitor completes the "**Project Synopsis**" sheet (*see below*) before the monitoring visit in order to have on hand during the interview a summary of project objectives, project purpose, results and activities.

Example of Project Synopsis

1	**Overall Objective**	
2	**Project Purpose**	
3	**Results/Outputs** (by component)	
4	**Activities** (by component)	

Table 13 Project Synopsis (source PCM expert training material)

The Monitor can thereafter proceed with preparations for **interviews/on-site visits.** The monitor should arrive to these visits with the Monitoring Template and with the relevant key project documents listed above. The interviews should start by asking the beneficiary/client if they are familiar with the project documents and if they understand them. The monitor should fill in the monitoring templates with as many details as possible in the additional comments section in order to obtain as complete a picture as possible of the situation.

The monitor can thereafter decide to visit other project stakeholders and/or recipients of the project and may use **Stakeholders' Opinion Sheets** during these interviews.

The next stage consists in the preparation of a **Monitoring Report** which should refer back to the following project documents:

1. Logical Framework Matrix (LFM);
2. Activity Planning;

Using these two documents will make it easier to assess whether:

- The project is on schedule (implemented according to the project work plan);
- The activities undertaken have led to the expected results as listed in the project Logical Framework Matrix;

The **Monitoring Report** should be compounded according to the ***five monitoring criteria:***

1. Relevance and Quality of Design:

Relevance: appropriateness of project to project purpose, to problems it was supposed to resolve and to the environment in which it operates;

Project Design: quality of planning of project in relation to achieving project purpose;

2. Efficiency: the degree to which activities and inputs (time, human and financial resources, materials) have been converted into outputs/results;

3. Effectiveness: the contribution made by the project results/outputs to the achievement of the project purpose;

4. Impact to date: Effect of the project on its wider environment;

5. Potential Sustainability: the likelihood of a continuation of the benefits produced by the project after it has ended;

(Source: Training material PCM project expert/OECD DAC oecd.org/dac/evaluation)

The **Monitoring Reporting template** should be completed on the basis of the information contained in the monitoring template and should include comments and remarks in accordance with each of the sections and the corresponding questions.

The monitoring report template may include a final **list of recommendations** for actions to take, in accordance with each of the monitoring criteria and on an overall basis.

The monitoring template can contain ratings to be given by the beneficiary/monitor in reply to each question asked.

The monitoring report thereafter gives an average of the total rating given according to each section/criteria (Relevance and Design, Efficiency, Effectiveness, Impact to date and Potential Sustainability).

See Annex 6 for more examples of Monitoring Tools - M & E Questions, Logical Framework Validation Checklists, Examples of Monitoring Templates; How to Build a Monitoring System;

Examples of tools described in this section can be found in ***Annex 6 Project Implementation and Monitoring.***

The template for the Implementation Planning stage is the **Project Implementation Plan (PIP)** (*see Annex 6*), a document that provides detailed information on project scope, description and financing plan, implementation arrangements, implementation plan, monitoring, reporting, evaluation and related terms of reference. With Project Formulation and Implementation Planning completed, the project contract can be negotiated and approved.

Project Start-up begins after a project is designed, approved and officially negotiated with donors and financing entities. This is the dividing point in the project cycle between Project Design and Project Implementation. Start-up includes initiation of work by bringing together project personnel, equipment, facilities, and other resources. It implies the creation of a project organization and implementation management team, as well as the final integration of stakeholders and tasks in line with the predefined project objectives. In many projects, start-up includes a location change from the proposer`s office to the implementation site.

The end product of the Project Start-up stage is a **Project Inception Report (PIR)**, a template that contains all necessary details for aligning project execution with previously produced design documentation that carried the project to this point (see Annex 6). Through the Project Inception Report the project team confirms a detailed and mutually agreed strategy for project implementation. The PIR is an important source of the information for all individuals or organizations that should join the project.

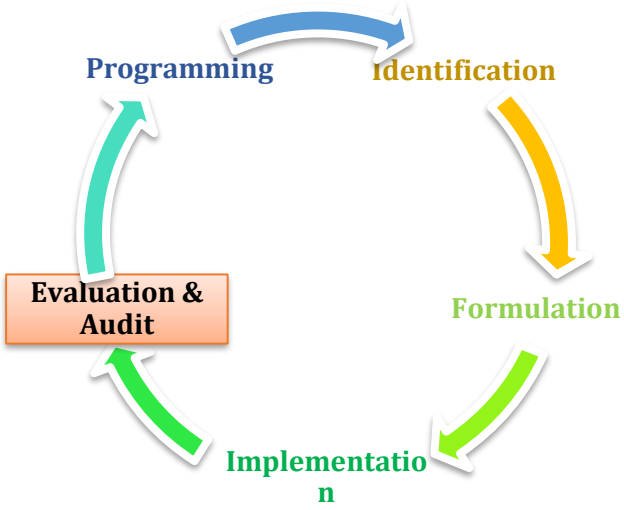
The end product of the Project Implementation phase is the **Final Implementation Report** (FIR). The FIR is a summary of project implementation, bringing together in one place all relevant information about major activities, important changes, and key problems may have arisen during project execution.

In the FIR's actual structure, it is also a summary of the many reports prepared during the project execution, typically containing the same type of information from a macro-level point of view but having different emphases at a micro-level.

A "mid-term project evaluation", for example, focuses on impacts, results and deliverables ("did the project do what was planned and did this contribute to the expected outcomes?"), while a "management audit" focuses on resources expenditures, activities and accomplishments ("did the project use its resources appropriately and achieve the planned results?").

Source: Project Management Toolkit, South Eastern Europe Regional Infrastructure Program for Water and Transport, Booz, Allen, Hamilton, USAid, January 2003).

Chapter 5: Project Evaluation Phase



V. EVALUATION & AUDIT PHASE

Evaluation should be carried out at or after project completion. Evaluation can be undertaken a few months or years after the project has finished in order to assess its long-term **impact** and **sustainability**. The evaluation can contribute to improving sector policies and strategies by providing recommendation in relation to a specific programme, policy or strategy.

The **audit** reviews how the funding was made and ensures that all payments were in accordance with the regulations related to the budget in line with the criteria of the funding agency. The role of the auditors is to evaluate how well the project management adhered to these rules and regulations.

	Evaluation	*Monitoring*
What?	Assessment of the impact and sustainability of a project, programme or strategy.	Assessment of a project at a certain point of project implementation according to the five *monitoring criteria*: relevance, efficiency, effectiveness, impact to date, prospects for sustainability.
Why?	Feedback for future project planning and programming.	To ensure that the project is progressing according to plan and that the activities and results are contributing to achieving the project purpose and ultimately overall project objective. To take immediate action should it be discovered that the proposed project results are not being achieved.
How?	Thorough analysis.	Assessment carried out at a specific moment of project implementation.
Who?	External evaluators.	Project Management (internal monitoring) – External monitors (external monitoring). Beneficiary monitoring.

When	Ex-ante (before), mid-term (interim), after completion (ex-post).	During project implementation, continuously (internal) or at regular intervals (external).
Scope	Project, Programme, Sector, Strategy.	Project.

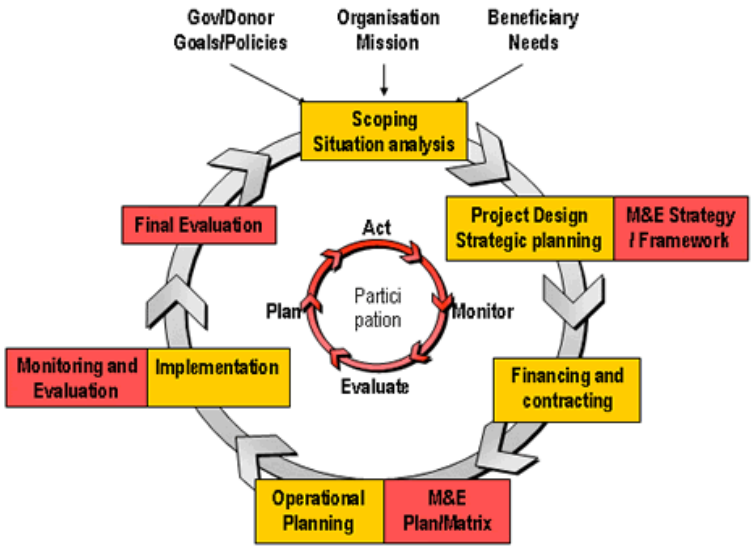
Table 14 Evaluation vs Monitoring (*Source: Training material PCM project expert/OECD DAC www.oecd.org/dac/evaluation)*

The Evaluation of a project after its completion will help the Municipalities assess how the project was managed, as well as its ultimate impact and usefulness for the Municipality and its citizens.

Project Evaluation Phase:

Input ✓ Project Monitoring Reports; ✓ Project Reports; ✓ Project Logframe Matrix; ✓ Evaluation Terms of Reference; ✓ Financial Documentation;	**Key Outputs** of this phase are: ✓ **Evaluation Report;** ✓ **Sustainability Assessment**;

Figure 8 Implementation and Monitoring (*Source: Training material PCM project expert*).



5.1 The main types of Evaluation

There are basically three types of evaluation, ex-ante, interim, and ex-post.

1. The **ex-ante evaluation** is carried out during the *formulation* phase of a programme or strategy and is only very rarely applied in the case of projects. The main reason why an ex-ante evaluation is undertaken is to:

- define the strategic purpose of the assistance;
- assist in the formulation of programmes and projects that will be necessary to achieve the strategic purpose;

An ex-ante evaluation can therefore take place as part of a national, regional or local strategy on the basis of which projects will be developed. It can also set ***milestones*** which will assist in measuring whether the strategic purpose of the assistance has been achieved.

2. An **interim** or **mid-term** evaluation will generally be undertaken half-way through the implementation of the strategy or programme. It will focus on:

- whether the strategy or programme is having the desired impact on its environment;
- whether the projects programmed as part of the strategy are contributing to the objectives of the strategy;
- whether the projects are being implemented efficiently and effectively;
- whether the projects are having the desired impact;

A mid-term evaluation may allow for a reorientation of a programme or strategy in order to adjust to a change in the project environment or if the result of the evaluation shows that the strategy is not having the desired impact.

3. The **ex-post evaluation** will take place sometime after the completion of a programme, strategy or project. The evaluation may even take place a year or two after completion as a means of checking whether the programme achieved the desired result. **The evaluation will usually focus on *impact* and *sustainability* of a programme, strategy or project**. However, the criteria of relevance, efficiency and effectiveness will also be used as tools in the framework of the **evaluation.** Frequently, the logical framework is used as a basis for the evaluation.

5.2 Impact and Sustainability

The most important factors in an ex-post evaluation are the criteria of impact and sustainability. A special type of evaluation undertaken after the completion of a programme or project is referred to **as Impact evaluation.**

This can be a relatively costly undertaking since it seeks to assess the impact of projects, strategies or programmes on separate sections of the population or on society to see whether the implementation of the project has had any effect. Impact evaluation can be used to:

- measure the outcome or impact of an activity;
- assess if the costs of carrying out the activity were justified;
- help decide on whether to pursue, modify or stop a specific programme or project;
- draw lessons for improving the design of future activities;
- compare the effectiveness of different projects or programmes;

- strengthen accountability;

The **Sustainability** of a project is easier to assess in that the evaluation will seek to answer the following questions:

- have the benefits resulting from the achievement of the project purpose continued to have an effect after the completion of the project?
- has the achievement of the project purpose actually contributed to the fulfilment of the project overall objective and, consequently, to the strategy of which the project is a component?

5.3 The Evaluation process

The evaluation process basically follows the same principles as the monitoring process, in that it is based on the **five Monitoring & Evaluation criteria**, with more focus on the last two criteria as more information should be available about this at the time of the evaluation.

In the case of an ex-post evaluation, the first step is to write up the **Terms of Reference** of the evaluation. The ToR should contain the following elements:

1**. Background information** on the project or programme to be evaluated

2. **The Purpose** of the evaluation, such as:

- feedback information to be used in future programming;
- study of the actual impact of the programme or project on specific groups or sectors;
- factors linked to accountability, i.e. feedback on whether resources allocated in the framework of the project or programme were spent efficiently;

3. The expected **result or output** of the evaluation, such as report, recommendations, conferences etc;

The criteria will be applied in the following manner:

- **Impact and sustainability** will be linked to the **Overall Objective** of the project, i.e. to what extent has the achievement of the Overall Objective had an impact on the environment of the project or programme and continued effects upon the completion of the latter;
- **Effectiveness** will be linked to the **project purpose** and will give an indication of the extent to which the results/outputs have led to the achievement of the purpose of the project or programme;
- **Efficiency** will be linked to the **project results** and will give an indication of the extent to which the activities of the project or programme have led to the desired results;

- **Relevance and Design** will be linked to the assessment as to whether the project or programme **addressed real needs or problems** at the outset.

Source: OECD/DAC (www.oecd.org/dac/evaluation)

See Annex 7 Project Evaluation and Sustainability Tools for Project Sustainability Assessment Report and Project Management Tools for Sustainability.

List of Annexes

Annex 1 Situational Analysis Tools

Environmental Scanning
SWOT Analysis

Annex 2 Project Identification Tools

Logical Framework Approach Main Steps
Logical Framework Infrastructure Project Example
Project Concept Note Live Nikea Street Subproject
Project Concept Note Template
Project Fiche Template and Example
Project Identification Tools Examples
Project Proposal Document Sample
Stakeholder Analysis Live Nikea Street Subproject
Stakeholder Needs Assessment

Annex 3 Project Formulation and Appraisal Tools

Cost Benefit Analysis (CBA) Guidelines Romania
Environmental Screening Form MDF
Formulation and Appraisal Phase Tools
Investment Financing Agreement (IFA)
Project Ranking Example
Risk Analysis and Risk Mitigation Strategies
Subproject Appraisal Report (SAR) Nikea Street MDF
Social Screening Form MDF
Subproject Appraisal Report Template MDF
Subproject Summary Report Template MDF

Annex 4 Pre-Feasibility and Feasibility Studies

Feasibility Studies
Guide for Feasibility Studies Romania
Pre-Feasibility Questions
ToR Feasibility Study Live Example Adjara

Annex 5 Terms of Reference (ToR)

MDF ToR Preparation of Detailed Design Live Example
Terms of Reference Standard Template

ToR Design Live Example Gori Samepo Street Rehabilitation
ToR Detailed Design Live Example Subproject Pakhulani Street
ToR for Consultancy Services Design and Supervision
ToR Goods MDF (Computer Equipment Procurement)
ToR Services MDF (Office Equipment Technical Service and Maintenance Procurement)

Annex 6 Project Implementation and Monitoring Tools

Delivery Acceptance Certificate MDF
Final Implementation Report (FIR) Template
GANTT Chart
Guidelines and Methodology Procurement Georgia
How to Build a Monitoring System
Project Inception Report (PIR) Template
Monitoring & Evaluation Questions and Monitoring Templates
Milestone Chart
Monitoring Plan and Template MDF
Project Management Tools Execution Stage Examples
Project Management Tools for Implementation and Monitoring
Project Management Start-Up Examples
Procurement Rules Georgia
Project Implementation Plan (PIP) Template
Site Visit Report MDF Live Example

Annex 7 Project Evaluation and Sustainability Tools

Project Management Tools for Sustainability
Project Sustainability Assessment Report Template

Annex 8 Glossary of Project Management Terms