ADDIS ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

SCHOOL OF COMMERCE

PROJECT IDENTIFICATION AND APPRAISAL PRACTICE OF PUBLIC HEALTH PROJECTS EXECUTED IN GURAGE ZONE, SOUTHERN ETHIOPIA

BY: GIRMA ALEMAYEHU (MPH)

A PROJECT REPORT SUBMITTED TO ADDIS ABABA UNIVERSITY, SCHOOL OF COMMERCE, IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR MASTER OF ARTS DEGREE IN PROJECT MANAGEMENT

ADVISOR: DR. ABRARAW CHANE (PH.D.)

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POSTGRADUATE PROGRAM

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DECLARATION

I, the undersigned, declare that this thesis is my original work and has not been presented for partial fulfillment for any educational qualification at this university or any other and in any projects by any means, and all sources of material used for the thesis have been duly acknowledged and cited.

_____

Girma Alemayehu

June 2022

CERTIFICATION

This is to certify that **Girma Alemayehu** has carried out his research work on the topic entitled "Project identification and appraisal practice of public health projects executed in the Gurage zone, Southern Ethiopia" The study is my original work and is suitable for the submission for the reward of Masters of Arts Degree in Project Management.

Advisor: **Dr. Abraraw Chane (Ph.D.)** Date

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APPROVAL PAGE

APPROVAL BY THE BOARD OF EXAMINERS

Advisor	**Signature**	**Date**
Dr. Abraraw Chane (Ph.D.)	_____	_____
Internal Examiner	**Signature**	**Date**
Dr. Zegeyie Muluye (Ph.D.)	_____	_____
External Examiner	**Signature**	**Date**
Dr. Asfaw Wassie (Ph.D.)	_____	_____
Chairperson (Graduate Committee)	**Signature**	**Date**
_____	_____	_____

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ACRONYMS/ABBREVIATIONS

CBA	Cost-benefit analysis
ICRC	International Committee of the Red Cross
PM	Project Management
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
UNEP	United Nations Environment Program
UNIDO	United Nations Industrial Development Organization

ABSTRACT

To improve the healthcare delivery system and health status of the population in our country, multiple projects are being implemented with huge funds. But how these projects are identified and appraised is unclear. Project identification is important for establishing an objective ranking of potential projects, effective matching of skilled resources to the right project, avoiding over-allocating limited resources, and project success. This study aimed to assess how public health projects are identified and appraised in governmental organizations with a specific case of projects led by the Gurage Zonal Health Department. The primary sources of project ideas, criteria used for project selection, the role of key stakeholders, and the level of their involvement were explored. The study used a descriptive research design and mixed research approach, with semi-structured interviews as the primary data source and analysis of organization documents as the secondary source of data.

Almost half (48.3%) of the study participants reported that public health projects implemented in the Gurage zone in the last five years are originating from the development agencies that funded them. The sponsoring organizations were promoting the projects based on the experience of others and success stories in different settings. More than one-third (34.5%) of the study participants stated projects were executed because they are part of the government plan. Only 17.2% of the study participants reported projects were demand-driven based on a need from beneficiaries or results of problem analysis. Consistency with the government priorities and policies, reported by 27.6% of the study participants, is the major criterion that were used to select public health projects in the study setting followed by compatibility with the requirements of the donors. Technical, administrative, and financial feasibility of the intervention with more emphasis on the availability

of the resources to implement the project were other major selection criteria reported by the study participants.

The rapid appraisal was reported to be performed by a quarter of the study participants but only 10.3% of the study participants revealed a need assessment survey was conducted for public health projects implemented in the zone. More than half (55.2%) of the study participants responded that the success of projects was evaluated but the commonly used criteria were delivering the project within the allocated budget and the scheduled time. Only 3.4% of the study participants reported that stakeholder satisfaction is considered a criterion to decide the success of projects.

Keywords: Project, Identification, Appraisal, Public Health, Project Management

CHAPTER-1. INTRODUCTION

This is the introductory chapter that introduces the common concepts starting with the definition of a project and project management followed by the importance of project identification and appraisal. Research questions intended to be answered and the objectives of the study were other components covered in this section. The significance of this study, its scope, and its limitations are the other parts included in the chapter.

1.1. Background

A project is defined as a time-limited, goal-directed temporary endeavor that requires the commitment of wide-ranging resources to achieve prespecified objectives and/or create unique products or services. A public project is a project carried out primarily for the benefit of the public at large (Gasik, 2016).

Project management is the application of knowledge, skills, tools, and techniques and the integration of processes to project activities to meet the project requirements and execute them effectively and efficiently. Effective project management is highly important to meet the objectives of the organization, satisfy and meet stakeholder's expectations, increase the probability of project success, timely manage risks and resolve problems, maintain optimum use of resources, manage and balance influences of the project constraints, meet deadlines and manage changes (Project Management Institute, 2017).

Effective project management should start with how projects are identified and selected. Project identification and selection is a scientific procedure that needs to consider the economic demand and purposes of the project to the area, and the optimal balance of input-output ratio.

Project appraisal is a systematic process of evaluating and assessing proposals for potential projects, and deciding on the best project that would contribute to the overall goals of the organization. Decisions made during this phase is very imperative for the subsequent cycles of the project and they have a significant effect on the execution and impact of the project. The main objective of project appraisal is to provide relevant information and options for decision-makers. The project appraisal ensures to development and formulation of projects, stop bad projects, prevents good projects from being destroyed, assesses risks, and determines how to reduce them (Ministry of Planning, 2019).

One of the common sectors in which public projects are designed is the health sector. To improve the healthcare delivery system and health status of the population in our country, multiple projects are being implemented with huge funds. But how these projects are identified and appraised is unclear. Most of the time projects are selected in the interest of the donors, and consistent with the rules and regulations of the government.

1.2. Statement of the Problem

Public sector projects are usually subject to political judgment, and public project analysis is often made only to justify political decisions. Decisions regarding public projects are strictly bounded by political problems and pressure. They are banded to the behavior of politicians, such as continuing the missed ineffective projects, undertaking projects supporting interest groups, undertaking temporal "anti-crisis" decisions, or problems with managing official bureaucracy (Brzozowska, 2007).

There are several purposes for public projects. For each of the purposes, single or multiple there are numerous alternative projects. Governments do not always make the best decisions about projects, but it should be possible to improve the decision process. Any fault in the selection stages of project management is the greatest risk because it results in a wrong project which can't be improved by effective planning and execution. The problem is choosing one project within the limits of available funds (Kerzner, 2009).

In developing countries, several challenging problems demand development projects. Selecting the right project that fits the local context, and resource requirements and with a greater chance of success is the foremost important step in effective project management. Project identification is important for establishing an objective ranking of potential projects, effectively matching skilled resources to the right project, avoiding over-allocating limited resources, and project success. Studies indicated several projects are not effective in delivering the intended outcome because they were not based on the needs of the beneficiaries. Before drawing a project, local conditions and other relevant factors must be taken into consideration (Monnappa, 2022).

Project management is one of the components required for the effectiveness of public health projects. This study aims to assess how public health projects are identified and appraised in governmental organizations with a specific case of projects led by the Gurage Zonal Health Department. The primary sources of project ideas, whether the project is a need-based priority for the participants, the role of key stakeholders and the level of their involvement, and the success of the project in meeting the intended objectives were explored.

1.3. Research Questions

This study was conducted to assess project identification and appraisal practice of public health projects implemented by the Gurage zone health office and efforts were made to answer the following research questions?

I. What are the sources of project ideas and how are they generated?
II. What are the criteria used for screening projects and how are viable projects selected?
III. Which approaches are used in project identification?
IV. To what extent are the stakeholders involved in project identification and appraisal?

1.4. Research Objectives

1.4.1. General Objective

- To assess project identification and appraisal practice of public health projects implemented by the Gurage zone health department from 2017- to 2022

1.4.2. Specific Objectives

- To identify the sources of project ideas for public health projects implemented by the Gurage zone health department from 2017- to 2022
- To examine the criteria used for project screening and selection for public health projects implemented by the Gurage zone health department from 2017- to 2022
- To assess approaches used in project identification and appraisal for public health projects implemented by the Gurage zone health department from 2017- to 2022

- To investigate the level of stakeholder involvement during project identification and appraisal for public health projects implemented by the Gurage zone health department from 2017- to 2022

1.5. Significance of the study

The findings of the study will be used by the concerned stakeholders as a source of information regarding the practice of project identification and appraisal of public health projects and identify the level of stakeholder involvement in the process. Understanding the sources of project ideas and the criteria used to select public health projects will help to judge whether appropriate selection criteria are used and to have better project identification and appraisal practice which in turn greatly benefits the success of the project.

1.6. Scope of the study

The scope of the study can be limited by the nature of the projects and the period it covers. In this study, the major focus is on public health projects that aimed to improve the health status of the community either directly or indirectly. Additionally, more emphasis was given to projects that were implemented by the zonal health department in the last five years (2017- 2022).

1.7. Limitations of the study

Since the study is only focusing on public health projects implemented in the last five years, it is difficult to generalize the findings and conclude this is the usual project identification and appraisal practice in the zonal health department.

1.8. Organization of the study

This report consists of five chapters, a list of references, and an annex. The **first chapter** is the introductory part in which the background of the study is described and the problem is stated in detail. It also includes the questions the study intends to answer along with the general and specific objectives of the study. The relevance of the study, and the range and extent of problems to be covered by the study are also briefly discussed in the first chapter. Limitations of the study and definitions of key terms used in the document are the other components included in the chapter.

The **second chapter** is a review of related literature. In this chapter public project is defined, the characteristics and nature of healthcare projects were discussed, how the success of a project is measured, the importance of project management in public health, project identification, the need for stakeholder analysis, and the conceptual framework of the study are included in this chapter.

The **third chapter** elaborates on the methodologies used for the conduct of the study. It consists of the research design, variables used in the study, descriptions of the study setting and population, sampling techniques to be used and required sample size for the study, sources of the data and how they were analyzed, software, and techniques used for analysis.

The **fourth chapter** showed how the data were analyzed. It includes a brief description of the demographic characteristics of the study participants and the major findings of the study. The sources of project ideas, the criteria used to select projects, and approaches utilized in project identification and analysis of the stakeholders were the main results displayed in this chapter.

The **last chapter** includes the summary of the findings, conclusion, and recommendations forwarded. The other component included in this report is a reference. All the literature used for the study is cited in a Harvard referencing style using one of the best referencing software EndNote

version 20 software and they are sorted alphabetically in the list of references. The annex includes the tools used for data collection.

1.9. Definition of Key terms

The following are definitions of some related key terms used in this document as they were defined in the Project Management Body of Knowledge text and other sources as indicated.

A project is a time-limited endeavor that has a definitive starting and end, undertaken to create a unique product, service, or result.

Project management is the application of skills, knowledge, tools, and techniques to project activities to meet project requirements.

Project identification is recognizing problems that need to be addressed and analyzing the ways to deal with them. This includes analysis of the existing situation, problems/needs identification, prioritization of idea, selection of a project idea, the definition of the project idea, consultation with stakeholders, and establishment of overall objectives (Tesfatsion Sahlu, 2012)

Project selection is the process of assessing projects and then choosing to implement some set of them to achieve the objectives of the organization.

Project appraisal is a process of assessing and questioning a project proposal and justifying the resources committed to the project.

A stakeholder is an individual, group, or organization that may affect, be affected by, or perceive itself to be affected by a decision, activity, or outcome of a project (Project Management Institute, 2017).

CHAPTER-2. REVIEW OF RELATED LITERATURE

In this chapter, the difference between public and other projects was described, the characteristic nature of public health projects was elaborated and the need for project management in the public health sector was discussed.

2.1. Characteristics of public projects and nature of public health projects

There are substantial differences between public and other projects. Public projects are selected for benefiting the public, not for profit, they should have to be socially desirable, improve the well-being of the general public, and enhance national economic development. The publicity of the projects can be analyzed in terms of ownership, funding, and control dimensions. Public projects are those owned, funded, and controlled by the state. An example includes all government agencies. Management of public projects is more complex than projects in another context. The commitment of employees, complexity of stakeholders, chain of communication, and regulatory decision-making challenge the management of public projects (Tesfatsion Sahlu, 2012, Gasik, 2016).

One of the common areas in which public projects are implemented is the health sector. Public health projects are concerned with assessing and monitoring the health of communities and vulnerable populations to identify health problems, address local and national health priorities, and ensure all populations have access to appropriate and cost-effective care (Frieden, 2014).

Projects that aimed to increase knowledge to make evidence-based decisions, design an intervention to resolve a specific health issue, disseminate and implement an existing intervention

among a target population, train the health workforce and build capacity to provide health services and intervention are among the examples of public health projects executed in our country.

Public health projects are developed to address or prevent a specific health problem and they are concerned with survival issues. The government plays a critical role as the project's financier or the impetus for the development of a health project. Managing change in a healthcare setting presents unique challenges associated with managing projects that rely on stakeholder support. An effective and coordinated alliance of political, technical, and managerial leadership is highly required. Despite the sector's unique characteristics, and its economic and social significance in a global society, substantial investments are made in projects and programs that contribute to the national health plan (Abyad, 2021).

Most healthcare projects are public projects. Government is a major actor, often the sponsor or reason for a healthcare project or it creates laws or standards that must be followed in healthcare projects. Donations are often a major source of funding. Many healthcare projects are prompted by donations or rely on them for their continuation. Many healthcare organizations are not-for-profit, instead of a profit motive, these organizations strive to fulfill their mission, for which community inputs and assessments are often required (Schwalbe, 2013).

2.2. Project success

Success is desired in everyday life, in business activities, and projects. But there is no uniform definition of project success among scholars, the only agreement between them is disagreement on what constitutes project success. Project success is largely in the eyes of the beholder. Traditionally, the success of a project is assessed by comparing its actual performance with its targeted criteria of scope, budget, time, and functionality. This simple measure has been criticized for ignoring the stakeholder aspect and the sustainability of projects. A project can be completed on time within budget but is considered a failed project if it did not meet the business objectives of the organization. More emphasis on contextual factors is needed to allow for clearer definitions of success for different projects (Müller et al., 2012, Beleiu et al., 2015, Kazhibekova and Jusufovic, 2010, Gemünden, 2015).

Since the assessment of project success may differ according to the evaluator, multi-dimensional criteria and approaches are required. The implementation process, the perceived value of the project, and client satisfaction with the final product can be used as a benchmark to measure project success or failure. Technical performance, the efficiency of execution, customer satisfaction, organizational ability, and business performance can be used as criteria to measure the success of a project (Thi and Swierczek, 2010).

Technical efficiency of project execution, completion on time within budget to a specified quality standard, personal growth, and experiences gained from executing the project, usage, and sustainability of the product/service, stakeholders satisfaction, competitive advantage attained and market share secured, and achievement of project objectives can be used as the major criteria to decide project success (Frefer AA et al., 2018).

The success of a public health project mainly depends on its impact on the target population, although this is not easy to measure as the results are frequently not tangible. This difficulty in measuring effects represents a considerable challenge for project managers. A project manager is an important factor leading to project success. Criteria other than time, scope, cost, and quality are needed to be considered in measuring public health project success, with a great emphasis on the value of project deliverables to customer and stakeholder satisfaction (Santos et al., 2020, Cooke-Davies, 2002, Prabhakar, 2008, Blaskovics, 2016).

2.3. Importance of project management in public health

Effective project management is highly important to meet the objectives of the organization, satisfy stakeholders and meet their expectations, increase the probability of project success, timely manage risks and resolve problems, maintain optimum use of resources, manage and balance influences of the project constraints, meet deadlines and manage changes (Project Management Institute, 2017).

One of the common areas in which the application of project management is very crucial is a healthcare delivery system. In the healthcare system projects are an effective way to introduce innovations, address new challenges, or find solutions to problems that cannot be accommodated by existing procedures. Hence, project management will be used to lower the cost of services, enhance healthcare facilities, improve outcomes and processes across the continuum of care, and help to better manage risks and complexities. Regulatory constraints and the diverse nature of stakeholders made the need for project management very vital in the healthcare system (Abyad, 2021).

Project management in the health sector is very important in defining essential projects and prioritizing them based on their importance and contributions to public health programs. Monitoring projects' time, cost, risk, and quality indicators; using them for strategic decision-making, managing knowledge through project lessons learned, periodically analyzing the success rate of the projects carried out, and establishing key performance indicators for performance evaluation and analysis are other areas in which knowledge of project management in public health is thought to be highly relevant (Bagherour and Erjaee, 2017).

Public health project needs effective communication of their success and benefits, health threats, and health equity being addressed. The application of project management in public health is important to overcome challenges related to managing human resources. It is often difficult to recruit, train, and retain the qualified workforce needed to implement effective public health projects and programs (Frieden, 2014).

2.4. Project identification and selection

The project cycle can be described by several models, such as Baum's, United Nations Industrial Development Organization (UNIDO), Choudhury's, Choudhury's, United Nations Environment Program (UNEP's), Project Management Body of Knowledge (PMBOK), and Baars's models. The widely used life cycle model in development projects is Baum's model, which involves identification, preparation, appraisal, implementation, and evaluation. Project identification is about finding a viable project idea that could contribute toward the predetermined objectives. (Tesfatsion Sahlu, 2012).

Project identification involves recognizing local problems to be addressed and considering the needs and interests of the potential stakeholders and beneficiaries. The problems and most realistic and operative interventions are analyzed, and project ideas and other actions are identified and screened. Problem analysis improves the understanding of the problem and its linkage with the needed actions and includes analyses of the needs, interests, strengths, and weaknesses of key stakeholders and beneficiaries. It helps project implementers, stakeholders, and sponsors understand the viability of the project. If the project is not viable then it could be rejected or changed to the requirements. If it is viable then policy planners hope to implement it by conducting a detailed feasibility study (Wendaferew, 2021, Tabish and Jha, 2011).

Activities involved during the initial stages of the project identification and appraisal are among the common success factors of projects. Proper planning and early assessment of the project context, proactive strategy setting, realistic goals, and a focus on sustainable outcomes, availability of the necessary resources, skills of the project manager, leadership, motivation, ability to coordinate resources, and use of the methods and tools, project goals, mission, and vision shared

with all concerned parties, stakeholder management, active and sustained involvement of highly motivated actors with complementary skills and interests, adequate and open internal and external communications, and sharing of information, consumer involvement during project planning and implementation are the major success factors of a project (Santos et al., 2020).

Projects can be selected based on profit maximization. The following are the common methods used in project selection. They can be classified into two major categories. Benefit measurement and constrained optimization methods. The benefit measurement method is based on estimated cash inflow and outflow, to calculate and compare the cost and benefits of the project. Benefit-cost ratio, economic value-added, scoring model, net present value, discounted cash flow, and opportunity cost is among the techniques used in the benefits measurement method. Constrained optimization methods are used in large and complex projects that require mathematical calculations and modeling. Additionally, other non-financial advantages like customer relationships and stakeholder satisfaction should be considered in project selection, especially in development projects (Monnappa, 2022).

2.5. Stakeholder analysis and Management

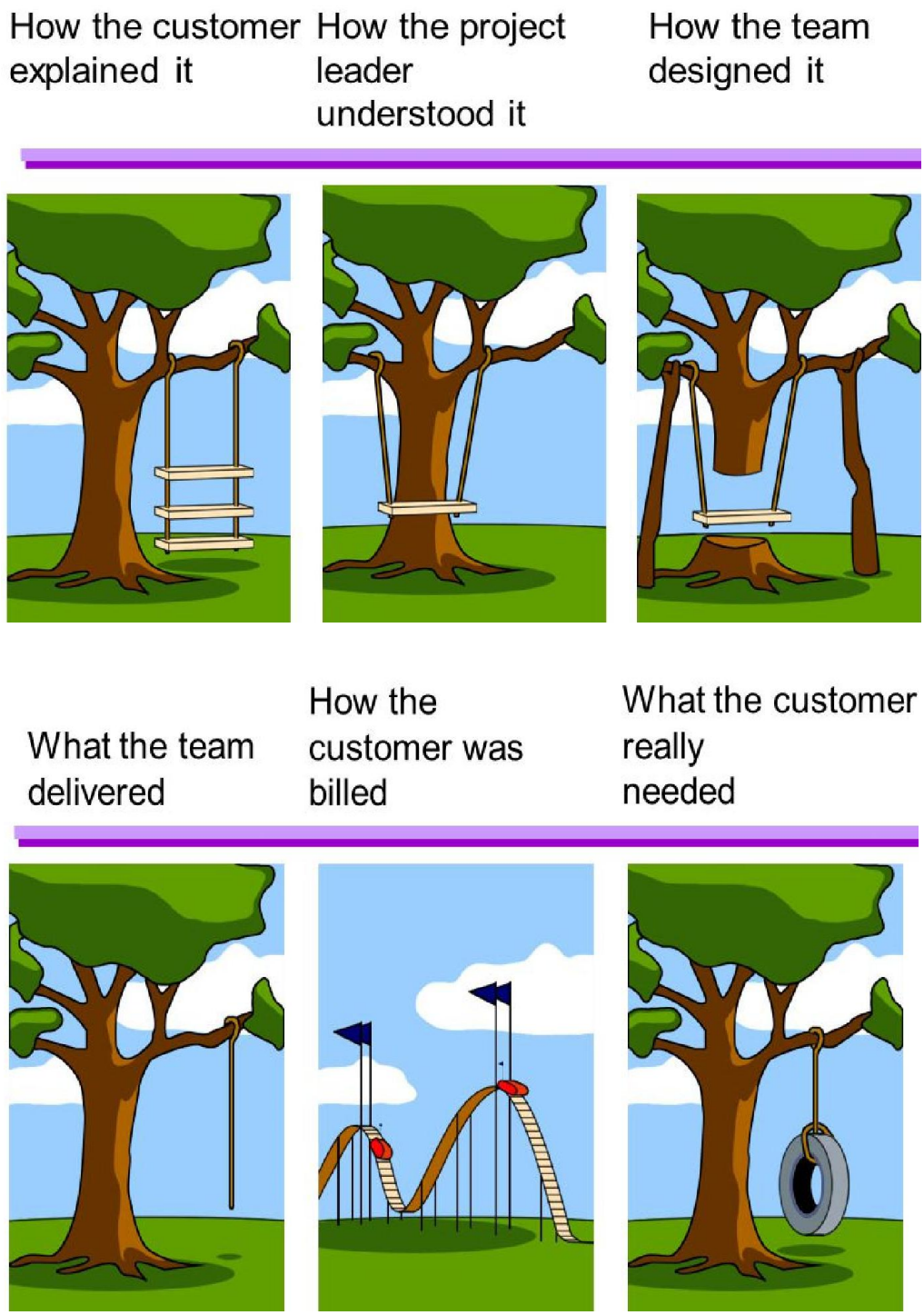
Stakeholders are peoples who have a stake in the project, affects, and/or are affected directly or indirectly, positively or negatively, by the process of the implementation or results of the project. Stakeholder analysis is a process of identifying all those stakeholders, understanding their interests, formulating effective mechanisms to address their interests, minimizing the negative influence, and maximizing the support of those affected positively. Engaging key partners in the early stages of project identification helps to ensure commitment and ownership which is highly important for project success. Collaboration with the stakeholders and understanding the socio-cultural needs of the project participants are very important factors for the success of public health projects (Walton, 2000).

Stakeholder analysis is important to identify major actors of the project, with their rights, interests, resources, skills, and abilities to take part or influence the course of a project, and detect and lower risks by identifying possible conflicts of interest and expectations between stakeholders. It also helps to place the population within the overall context, identify organizations that are already working in the area and their activities and understand their position and interests, weaknesses and strengths, identify possible partners for the project, minimize tension, improve efficiency, pools knowledge and experience, maintain sustainability and sustained impact of the project (ICRC, 2008).

The success of public health projects majorly depends on the involvement of beneficiaries. Engaging them in the design of a project and their participation throughout the process is very important to meet the intended goals of the project (Magnus Li, 2017).

Adequate involvement and participation of key stakeholders during project identification and implementation, active listening, trust and communication, and having compatible development priorities are among the success factors of public health projects (Santos et al., 2020).

Stakeholder management deals with managing the relationships and interests of the different stakeholders involved in a project. It is argued that meeting stakeholders' expectations and needs will favor the prospects of successful projects while failing to do so can cause projects to fail. A project that does not successfully manage its stakeholders is assumed to have failed even if it meets the criteria of time, cost, and quality (Ibrahim et al., 2014).



Source: (Saunders, 2008).

Figure 1. Importance of understanding stakeholders and setting shared objectives

2.6. Conceptual framework of the study

Conceptual models, like theories, deal with concepts assembled by their relevance to a common theme and provide a perspective regarding interrelated phenomena in loosely structured ways than theories. Conceptual models can serve as springboards for generating research hypotheses.

The following figure presents the conceptual framework of the study developed after reviewing related literature indicating the range of variables the study tried to address.

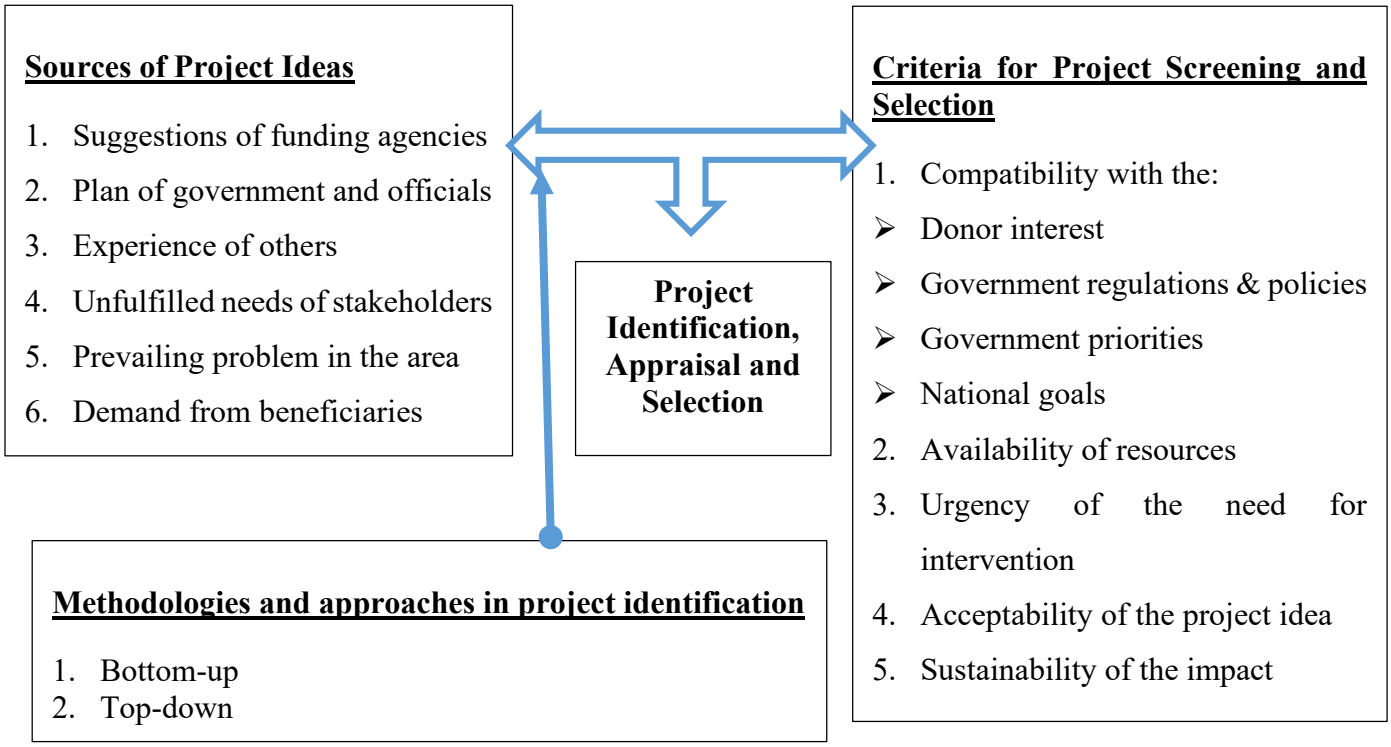


Figure 2. Conceptual framework of study

CHAPTER-3. RESEARCH METHODOLOGIES

In this section, the research design used, the study setting, the target population, sources of data, sampling technique, data collection techniques, data processing, and analysis methods were discussed.

3.1. Research design

Research design is a pre-arrangement that the researchers make to answer the research question in an economically feasible and scientifically acceptable way. It is a master plan that specifies the methods and procedures for collecting and analyzing data and generating the needed information. It can be considered as an architecture of the study with the details of the study population, methods, and procedures of the study, outline for the collection, measurement, and analysis of data the time frame required for the study.

Research design is a conceptual structure within which research would be conducted efficiently yielding maximal information. In other words, the function of research design is to provide for the collection of relevant evidence with minimal expenditure of effort, time, and money. But how all these can be achieved depends mainly on the research purpose.

The purpose of research may include description, exploration, diagnosis, and experimentation. In the case of exploration more flexible design with the opportunity to consider various aspects of the problem is preferred. However, in other situations, an appropriate design with minimal bias and higher reliability is favored. Selection of the appropriate research design should consider the

following components: the means of obtaining the information, availability, and skills of the research team, the time available for research, and the cost relating to research.

Decisions made during the design of the study help to answer the following questions. What is the study about? Why is the study being conducted? Where will the study be carried out? What type of data is required? Where can the required data be found? What periods will the study include? What will be the sample design? What techniques of data collection will be used? How will the data be processed and analyzed? In what style will the report be prepared?

A good research design is characterized by the following components being flexible, appropriate, efficient, and economical, minimizing bias and maximizing the reliability of the data collected and analyzed, yielding maximal information, and providing an opportunity for considering several aspects of a problem. The selection of good design is related to the purpose or objective of the research problem and the nature of the problem to be studied, the means of obtaining information, and the availability of time, money, and skills of the researcher (Rothari, 2004).

The study used a descriptive research design and a mixed research approach. Descriptive research includes surveys and fact-finding inquiries of different kinds. The major purpose of descriptive research is the description of the state of affairs as it exists at present. The researcher has no control over the variables, and only reports what has happened or what is happening. The methods of research utilized in descriptive research are survey methods of all kinds, including comparative and correlational methods. In analytical research, on the other hand, the researcher has to use facts or information already available and analyze these to make a critical evaluation of the material.

A research approach can be classified as either quantitative, qualitative, or mixed method. Quantitative research is based on the measurement of quantity or amount. It applies to phenomena

that can be expressed in terms of quantity. Qualitative research, on the other hand, is concerned with phenomena relating to or involving quality or kind. Qualitative research is especially important in the behavioral sciences where the aim is to discover the underlying motives of human behavior (Rothari, 2004).

If the researcher wants their research to be grounded in systematic and empirical philosophy, they should consider the quantitative research method. Quantitative research implies that the information obtained is quantifiable, hence the researcher should, early in the research process, think about statistical tests that will aid their analyses.

The following are some of the characteristics of the qualitative study: involves a merging together of various data collection strategies, is flexible and elastic, capable of adjusting to what is being learned during data collection, tends to be holistic, strives for an understanding of the whole, requires researchers to become intensely involved, often remaining in the field for lengthy periods, requires the researcher to become the research instrument and requires ongoing analysis of the data to formulate subsequent strategies and to determine when fieldwork is done.

A mixed-methods design approach is a balance between the qualitative flexibility of the research and its exploratory nature and that of the fixed elements encompassed in many quantitative approaches. The results of mixed methods may help to generate holistic, improved, and extensive knowledge. The researcher should be conversant with both quantitative and qualitative methodologies and designs if they are to implement mixed methods in their study. It is the researcher's responsibility to make an informed choice as to what would best suit their research, as well as to be able to justify the approach used. In this study, a mixed research approach was used (Curtis and Drennan, 2013).

The following are the rationale for using a mixed approach.

1. **Complementary**: Blending qualitative and quantitative data in a study is that they are complementary; they represent words and numbers, the two fundamental languages of human communication. Quantitative studies are often strong in generalizability, precision, and control over extraneous variables. The strength of qualitative research lies in its flexibility and its potential to yield insights into the true nature of complex phenomena through in-depth scrutiny. By using mixed methods, researchers can allow each method to do what it does best, with the possibility of avoiding the limitations of a single approach.

2. **Enhanced Theoretical Insights**

   Qualitative and quantitative research constitute alternative ways of viewing and interpreting the world. These alternatives are not necessarily correct or incorrect; rather, they reflect and reveal different aspects of reality. We believe that the blending of quantitative and qualitative data in a single analysis can lead to insights on these multiple aspects that might be unattainable without such integration.

3. **Incrementality**

   Qualitative methods are well suited to exploratory or hypothesis-generating research early in the development of a problem area, and quantitative methods are needed as the problem area matures for verification.

4. **Enhanced Validity**

   The integration of qualitative and quantitative data can provide better opportunities for testing alternative interpretations of the data, for examining the extent to which the context helped to shape the results, and for arriving at convergence in tapping a construct.

   (Polit and Beck, 2003)

3.2. Study area and target population

The study was conducted in the Gurage zone health department, which is responsible for coordinating all the health facilities and related activities including public health projects under their supervision. The Gurage zone is one of the zones in the southern nations and nationalities' regional states. The capital of the zone is Wolkite town which is located 158 km from the national capital of Addis Ababa in the southwest direction. The zone has 13 woredas and 5 town administrations. There are nine functional hospitals in the zone, seven of which are public, and two of them are owned by non-governmental organizations. In addition, there are 64 governmental and six non-governmental Health centers and 412 Health posts in the zone.

3.3. Sampling technique/methods and sample size

Sampling is the process of selecting participants for the research study. The samples are selected from the sampling frame and should have to be representative of the population being studied. A complete enumeration of all the items in the 'population' is known as a census inquiry. But in practice, this may not be possible. Besides, this type of inquiry involves a great deal of time, money, and energy. Hence, quite often we select only a few items from the universe for our study purposes.

Samples can be selected by either probability or non-probability technique. With probability samples, each element has a known probability of being included in the sample but the non-probability samples do not allow the researcher to determine this probability. Probability samples include simple random sampling, systematic sampling, stratified sampling, and cluster sampling whereas non-probability samples are those based on convenience sampling, purposive sampling, and quota sampling techniques. The following are brief descriptions of those sampling techniques.

- Simple random sampling: in this type of sampling every item in the population has an equal chance of inclusion in the sample. lottery, random number tables, and/or software-generated random numbers can be used.
- Systematic sampling: useful when a sampling frame is available in the form of a list. In such a design the selection process starts by picking some random point in the list and then every n^{th} element is selected until the desired number is secured.
- Stratified sampling: If the population from which a sample is to be drawn does not constitute a homogeneous group, then the stratified sampling technique is applied to obtain a representative sample. In this technique, the population is stratified into several non-overlapping subpopulations or strata, and sample items are selected from each stratum.
- Cluster sampling: involves grouping the population and then selecting the groups or the clusters rather than individual elements for inclusion in the sample. The clustering approach can make the sampling procedure relatively easier and increase the efficiency of fieldwork.
- Multi-stage sampling: This technique is meant for big inquiries extending to a considerably large geographical area like an entire country. Under multi-stage sampling, the first stage may be to select large primary sampling units such as states, then districts, then towns, and finally certain families within towns.
- Quota sampling: In stratified sampling, the cost of taking random samples from individual strata is often so expensive that interviewers are simply given a quota to be filled from different strata, the actual selection of items for the sample being left to the interviewer's judgment. The size of the quota for each stratum is generally proportionate to the size of that stratum in the population.

- Purposive sampling is considered desirable when the universe happens to be small and a known characteristic of it is to be studied intensively. Also, there are conditions under which sample designs other than random sampling may be considered better for reasons like the convenience and low costs. The sample design to be used must be decided by the researcher taking into consideration the nature of the inquiry and other related factors (Rothari, 2004, Curtis and Drennan, 2013).

  In this study, the major actors in the implementation of the projects were purposively sampled and included in the study. They were asked how public health projects were identified and selected for the last five years 2017 up to 2022. The study participants include those who are involved in managing the project, project staff, beneficiaries, and other stakeholders. The sample size of the study was sixty, 30 from the project staff and 30 from the beneficiaries of the project.

3.4. Data collection – source, types, instruments

There are several ways of collecting the appropriate data which differ considerably in the context of money costs, time, and other resources at the disposal of the researcher. Primary data can be collected in any one or more of the following ways:

- **Observation**: This method implies the collection of information by way of the investigator's observation, without interviewing the respondents. The information obtained relates to what is currently happening and is not complicated by either the past behavior or future intentions or attitudes of respondents. This method is an expensive method and the information provided by this method is also limited. As such this method is not suitable for inquiries where large samples are concerned.

- **Personal interview:** investigator seeks answers to a set of pre-conceived questions through personal interviews. This method of collecting data is usually carried out in a structured way where output depends upon the ability of the interviewer to a large extent.
- **Telephone interviews:** contacting the respondents by telephone itself, plays an important role when the survey has to be accomplished in a very limited time.
- **Self-administered interviews:** structured questionnaires provided to be answered by the respondents. Less expensive and less time-consuming as it can be administered to multiple respondents simultaneously. But it lacks probing and requires skills and education of the respondents.
- Secondary data can be collected by **record reviews** from various documents and repositories. The quality of secondary data may be compromised by having some incomplete values of variables.

  The researcher should select one of these methods of collecting the data taking into consideration the nature of the investigation, the objective and scope of the inquiry, financial resources, available time, and the desired degree of accuracy.

- ✓ In this study, both primary and secondary sources of data were used. For the primary data, semi-structured interviews were used as a data collection technique. Secondary data sources were obtained through the analysis of organization documents and reports.

  The types of data collected for this study include the sources of project ideas, criteria used for project screening and selection, Stakeholder analysis, and approaches used in project identification and appraisal.

3.5. Data analysis – model, techniques, software

The analysis of data requires the classification of the raw data into purposeful and usable categories through coding, tabulation, and then drawing statistical inferences. Analysis after tabulation is based on the computation of percentages and coefficients. Through the use of statistical tests, we can establish whether the relationship is real or is the result of random fluctuations. If the difference happens to be real, the inference will be that the two samples come from different universes and if the difference is due to chance, the conclusion would be that the two samples belong to the same universe.

For this study, the completeness of the distributed questionnaires was checked daily and the collected data were entered into IBM SPSS ® Statistics software version 28. Data exploration and cleaning were done, missing values were cross-checked and data were made ready for analysis. The cleaned data were analyzed with descriptive statistics and the results were presented in narration, tables, and figures.

3.6. Reliability and validity analysis

Reliability is concerned with consistency, stability, and dependability with which it measures an attribute. Stability can be established by measuring test-retest reliability. The scaled questionnaire is distributed at two different time points to a subsample of the population of interest and the magnitude, direction, and statistical significance of correlation coefficients between the two sets of scores are determined for each question. Positive correlation coefficients of more than 0.7 are generally accepted as evidence of reliability; poor correlations may indicate problems with question wording.

A questionnaire may be considered to be internally consistent to the extent that all the questions are measuring the same characteristic. The extent to which internal consistency has been achieved can be determined by the measurement of Cronbach's coefficient alpha. Values of coefficient alpha greater than 0.7 are generally accepted as evidence of homogeneity (Curtis and Drennan, 2013).

In this study, the reliability of the variables in measuring the internal consistency of the tools was measured by the commonly used reliability scale indicator, Cronbach's alpha. The value of Cronbach's alpha calculated by using IBM SPSS® Statistics version 28 was 0.78 suggesting a fairly higher internal consistency of the tools.

Validity refers to the extent to which the questionnaire measures the dimension of interest, and what it is intended to measure. Different dimensions of internal validity are content, criterion-related, and construct validity.

Content validity is determined by the extent to which the questions are representative of what is known about the specific topic. Approaches to establishing content validity can include preliminary interviews and/or focus groups with a subsample drawn from the population of interest, and thematic analysis subsequently informing questionnaire content. The use of an expert panel to review questionnaire content and structure offers another independent view to establishing content validity. Criterion-related validity: the relationship between scores on the questionnaire and their correlation with an independent criterion are tested. Construct validity: what construct is being measured? Several approaches can be used to determine to construct validity: these include factor analysis, which identifies clusters of related variables.

Distinct from internal validity is external validity which refers to the generalizability of research findings to the wider population of interest.

In this study, the validity of the data collection tools and instruments was ensured by conducting a pre-test of the questionnaire and accompanied by a pilot study before the actual data collection.

3.7. Ethical Consideration

Support letter was obtained from the Addis Ababa University, School of Commerce, Department of Business Administration and Information System, and issued to the Gurage zone health department. Additionally, after elaborating purposes of the study, informed consent was obtained from each of the study participants.

CHAPTER-4. DATA ANALYSIS, PRESENTATION, AND DISCUSSION

This chapter presents the demographic characteristics of the study participants, sources of ideas for public health projects executed in the study setting, the criteria and approaches used for selecting those projects, and stakeholder analysis practice. The collected data are analyzed and presented in narration, tables, and different figurative formats as deemed appropriate.

4.1. Demographic Characteristics

Of the 60 questionnaires distributed to the study participants, 58 of them responded to the survey making the response rate 97%. The age of the study participants ranges from 19 to 48 years with a mean ± standard deviation of 29.8±6.5 years. The majority of the study participants were males (70.7%) and a half (51.7%) of the study participants were having a work experience of fewer than five years. Almost, an equal number of study participants from the project staff and beneficiaries of the project were included in the study (Table 1).

Table 1. Demographic characteristics of the study participants

Variable	**Categories**	**Frequency**	**Percentage**
Age	<30	38	65.5
	30-40	15	25.9
	>40	5	8.6
Sex	Male	41	70.7
	Female	17	29.3
Work experience	<5 years	30	51.7
	5-10 years	24	41.4
	>10 years	4	6.9
Educational status	Diploma	10	17.2
	Degree	40	69
	Master and above	8	13.8
Relation to the project	Project staff	28	48.3
	Beneficiary	30	51.7

4.2. Project Identification practice

4.2.1. Sources of a Project Idea

Almost half (48.3%) of the study participants reported public health projects implemented in the Gurage zone in the last five years are originating from the development agencies that funded them. The sponsoring organizations were promoting the projects based on the experience of others and success stories in different settings. More than one-third (34.5%) of the study participants responded that projects were executed because they were part of the government plan. Only 17.2% of the study participants revealed that projects were demand-driven based on a need from beneficiaries or results of problem analysis (Figure 3).

As understood from the results, the extent to which concerned stakeholders are involved and end-users are engaged is minimal. Involving beneficiaries of the project starting from the early identification phase of the project would ease the implementation of the project and increase the chance of success (Walton, 2000).

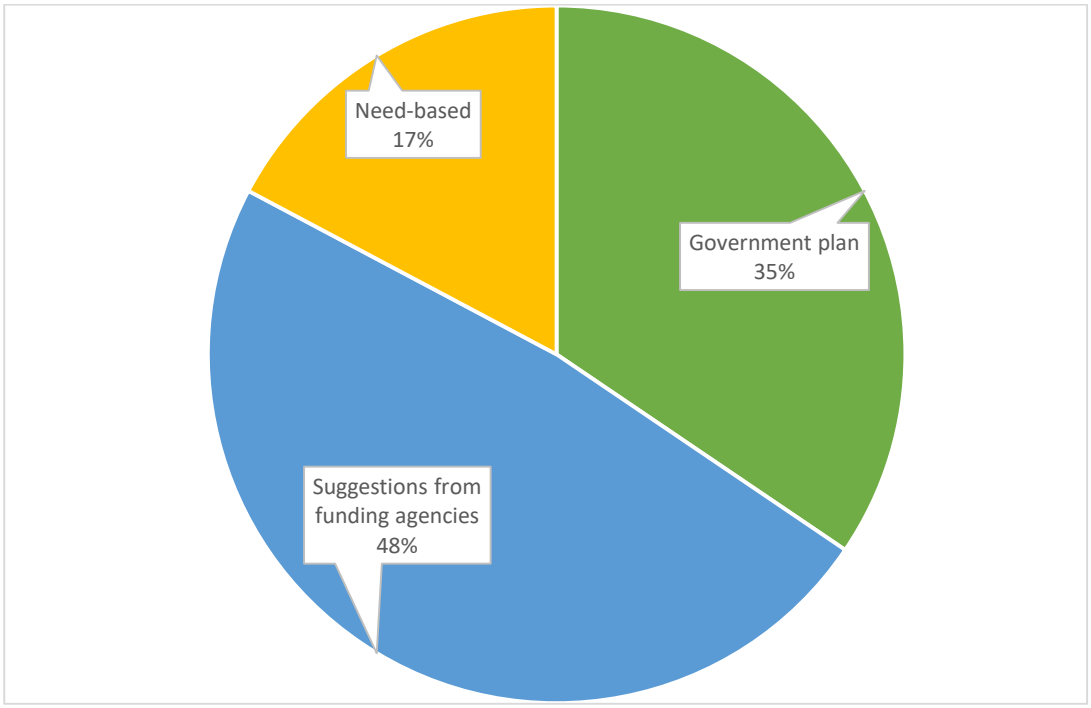


Figure 3. Sources of Project ideas for public health projects conducted in the Gurage zone

4.2.2. Criteria used for Project Selection

Consistency with the government priorities and policies, reported by 27.6% of the study participants, is the major criterion that were used to select public health projects in the study setting followed by compatibility with the requirements of the donors. Technical, administrative, and financial feasibility of the intervention with more emphasis on the availability of the resources to implement the project were other major selection criteria reported by the study participants.

The urgency of the need for the intervention and the level of demand for project output, acceptability of the project idea by the stakeholders, compatibility with the custom and traditions of the beneficiaries, conformity with the development objectives and priorities, and sustainability of the project impact beyond the intervention period are less frequently considered criteria for selecting public health projects in the study setting (Figure 4).

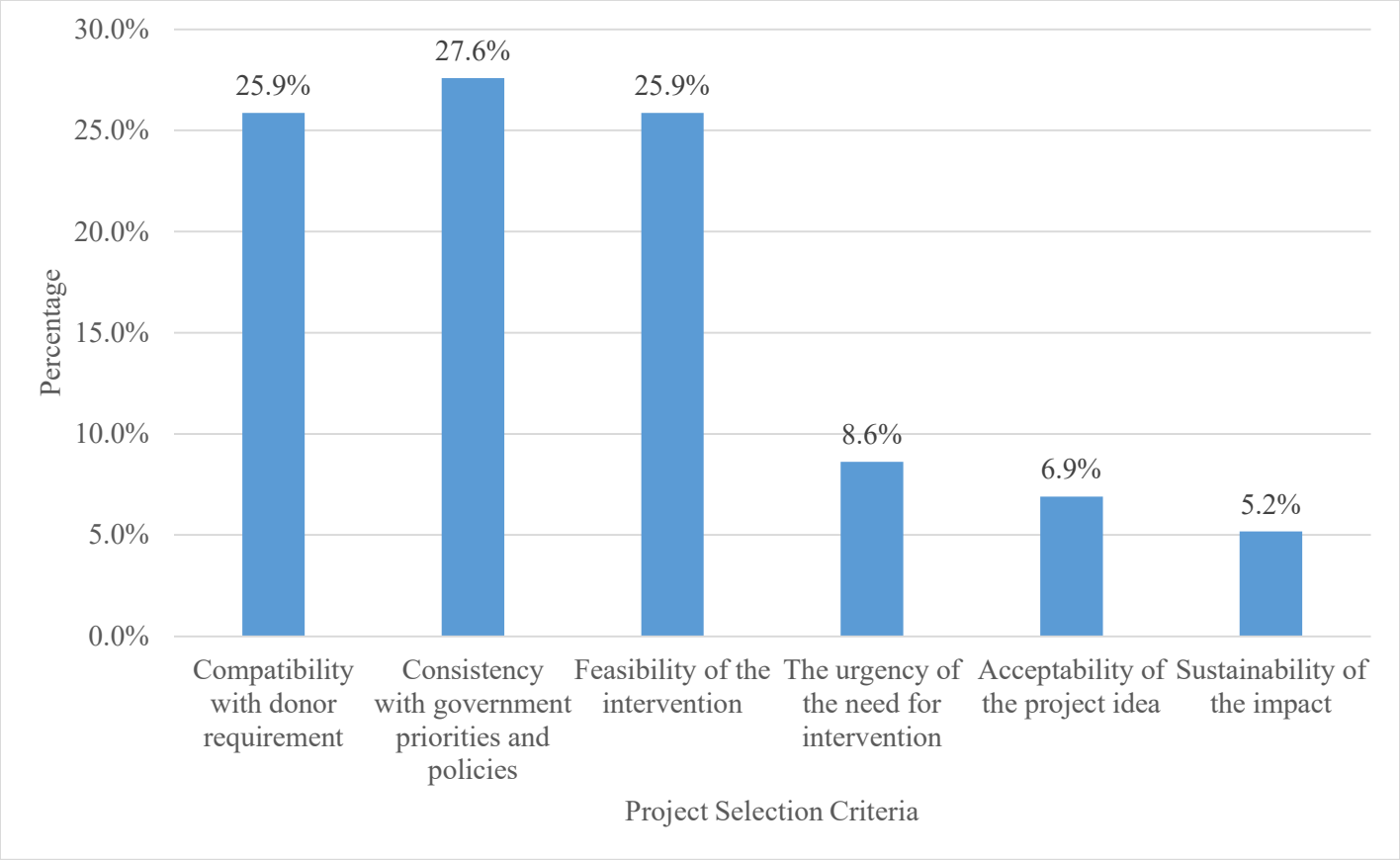


Figure 4. Criteria used to select public health projects in the Gurage zone

4.2.3. Approaches used in Project identification and appraisal

More than four-in-five (81%) of the study participants reported public health projects identified in the study setting were based on top-down approaches. The rapid appraisal was reported to be performed by a quarter of the study participants but only 10.3% of the study participants revealed a need assessment survey was conducted for public health projects implemented in the zone. More than half (55.2%) of the study participants responded that the success of projects was evaluated but the commonly used criteria were delivering the project within the allocated budget and the scheduled time. Only 3.4% of the study

participants reported that stakeholder satisfaction is considered a criterion to decide the success of projects (Table 2).

Table 2. Approaches and Methodologies used in project identification and appraisal

Variable	**Categories**	**Frequency**	**Percentage**
Approaches used in project identification	Top-down	47	81
	Bottom-up	11	19
Need assessment survey conducted	Yes	6	10.3
	No	52	89.7
Rapid appraisal performed	Yes	14	24.1
	No	44	75.9
The success of the project evaluated	Yes	32	55.2
	No	26	44.8
Criteria for evaluating project success	Cost	16	27.6
	Time	9	15.5
	Quality	5	8.6
	Stakeholder Satisfaction	2	3.4
	Not evaluated	26	44.8

4.3. Stakeholder Analysis

Almost all the study participants have agreed that project stakeholder identification is a part of the project selection process and that potential stakeholders are known and well-documented. However, less than a quarter (24.1%) of them agreed that the needs of the stakeholders were identified and analyzed, and only 12.1% agreed there was an opportunity for the stakeholders to contribute their idea to the project. Only 15.5% of the study participants agreed projects were executed based on mutual agreement of the stakeholders on the need for the project. More than two-thirds (67.2%) of the study participants agreed that there was a higher level of communication with the stakeholders but the contents of the communication were more focused on notification and information rather than mutual understanding (Table 3).

Table 3. Stakeholder analysis practice during project identification

Variable	Categories	Frequency	Percentage
Stakeholder identification part of project selection	Agree	53	91.4
	Disagree	5	8.6
Each stakeholder is known and documented	Agree	56	96.6
	Disagree	2	3.4
The needs of each stakeholder are identified and analyzed	Agree	14	24.1
	Disagree	44	75.9
Strategies developed to address the needs of stakeholders	Agree	10	17.2
	Disagree	48	82.8
Agreement on a project made between stakeholders	Agree	9	15.5
	Disagree	49	84.5
Opportunity for stakeholders to contribute their ideas	Agree	7	12.1
	Disagree	51	87.9
Communication with each stakeholder	Agree	39	67.2
	Disagree	19	32.8

CHAPTER-5. CONCLUSION AND RECOMMENDATION

This chapter is focused on the summary of the main findings, a conclusion drawn from the results, and recommendations forwarded based on the findings of the study are included.

5.1. Summary of findings

As revealed from the findings of the study, the major sources of project ideas for public health projects executed in the Gurage zone for the last five years are the suggestions of the funding agency followed by the government plan and priority. The most important criteria used to appraise and select those projects are their consistency with the rules and regulations of the government, compatibility with the donor's requirement, and availability of resources.

The top-down approach is commonly used in project selection and needs assessment surveys are usually not conducted. Stakeholders of the projects are mostly identified and communicated but engaging them to contribute their idea to the project and designing strategies to meet their needs and concerns are minimal.

5.2. Conclusion

The results of the study revealed that most public health projects executed in the study setting for the last five years are not based on the need of the beneficiaries rather they are implemented because they are recommended by the sponsoring agencies and/or the government. Only one in ten of the study participants reported, that a need assessment survey was conducted for the implemented projects, others revealed projects are implemented because they are part of the government plan and there were resources available to implement them.

The success of those projects was usually measured by the traditional budget, time, and scope parameters and completely disregarded the perceptions of the beneficiaries and the value of the project for the stakeholders.

5.3. Recommendation

Based on the findings of the study the following recommendations are forwarded. Since public health projects are targeted to improve the health status of the public and are concerned with survival issues, due attention should be given to how they are identified and selected to have better outcomes and meet the intended objectives.

- Any organization that intends to implement public health projects must work with all related stakeholders and involve them starting from the inception of the project and maintain their participation throughout the execution phase. To have a lasting impact, the concerns and ideas of beneficiaries have to be incorporated into the project.

- Public health project evaluation should not be focused only on the conventional project cost, duration, and scope constraints rather they should have to be judged based on the impact they created on the stakeholders and the end-users of the projects.

5.4. Limitations and Areas of Further Research

Due to time and budget limitations, the study was not comprehensive enough in assessing the public health project identification and appraisal practices in the Gurage zone. The evaluation of outcomes and impacts of the public health projects implemented in the zone in the last years have to be further assessed by a comprehensive large-scale study.

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ANNEX

DATA COLLECTION TOOL

ADDIS ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

SCHOOL OF COMMERCE

POSTGRADUATE PROGRAM

Information sheet and Consent form

Dear Sir/madam

My name is _____, I'm a data collector for a Master's thesis entitled "Project identification and appraisal practice of public health projects executed in the Gurage zone, Southern Ethiopia" conducted by Girma Alemayehu, graduating Masters student in Project Management at Addis Ababa University. The purpose of the study is to assess the public health projects identification and appraisal practice and I am kindly requesting your valuable participation in this survey which will take 10 minutes to complete.

Your participation in the study is completely voluntary and you may withdraw and discontinue participating in the study at any time, for any reason, if you decide so. If you discontinue participation, any information already collected will be discarded. Confidentiality of your information will be kept to the fullest extent possible.

Your name will not be used in any report or publication. If you have any questions about your participation in this research, you can contact the principal investigator at 0911056495 or using the email address girmalemayehu16@gmail.com.

Thank you for your time and consideration.

Sincerely,

Agree: _____ (continue)

Don't agree: _____ (stop)

QUESTIONNAIRE

S. No	Variables	Possible answers
01	**Sociodemographic Characteristics**	
101	Age	_____
102	Work experience in years	_____
103	Sex	1. Male 2. Female
104	Educational status	1. Diploma and below 2. Degree 3. Masters and above
105	Relation to the project	1. Project staff 2. Beneficiary
106	Trained in project management	1. Yes 2. No
02	**Project Identification and Selection process**	
201	Sources of project ideas	1. Government plan 2. Suggestions from funding agencies 3. Need-based
202	Criteria used for project screening and selection	1. Compatibility with the donor requirement 2. Consistency with government priorities, regulations, and policies 3. Feasibility of the intervention

		4. The urgency of the need for intervention, 5. Acceptability of the project idea 6. Sustainability of the impact
203	Project proposal prepared	1. Yes 2. No
204	Project proposal evaluated	1. Yes 2. No
205	Project identification and selection guidelines available in the organization	1. Yes 2. No

03 Stakeholder Analysis

#	Variables	Strongly disagree	Dis-agree	Neutral	Agree	Strongly agree
301	Stakeholders' identification part of project selection					
302	Each stakeholder is known and documented					
303	The needs of each stakeholder analyzed and identified					
304	Strategies developed to address the needs of stakeholders					
305	Agreement on projects made between stakeholders					

306	Opportunity for stakeholders to contribute their idea					
307	Communication with each stakeholder					

04	**Approaches used in project identification and appraisal**	
401	Approaches in which the project identified	1. Bottom-up 2. Top-down
402	Conducted Need assessment survey	1. Yes 2. No
403	Performed rapid appraisal	1. Yes 2. No
404	Objectives of the project set	1. Yes 2. No
405	The success of the project evaluated	1. Yes 2. No
406	How was project success measured	1. Cost 2. Time 3. Quality 4. Customer satisfaction 5. Not measured

Thank you for your Cooperation!