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COLLEGE OF SOCIAL SCIENCE

Faculty of Economics and Business

DEPARTMENT OF PROJECT MANAGEMENT

(MA) RESEARCH THESIS

Green project management practices: Adoption and Barriers in Case of Samara-Logiya

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APPROAVAL SHEET

COLLEGE OF SOCIAL SCIENCE

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(MA) RESEARCH THESIS

This is to certify that the final research proposal prepared by Luli entitled "Green project management practices: Adoption and Barriers in Case of Samara-Logiya, Northeastern Ethiopia." and submitted in partial fulfillment of the requirement for the degree of Master of Art in sociology to the College of Social Science of Economic and Business Department of Project plan Management Studies and meets the accepted standards with respect to originality and quality. This Research proposal is my original work and has not been presented for MSc. / MA degree in any other University and that all the sources and materials used for the research thesis have been properly acknowledged.

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This is to certify that the above declaration made by the candidate is correct to the best of my knowledge as an Advisor.

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Abbreviation and Acronyms

BoFED- Bureau of Finance & Economic Development

FGD- Focus Group Discussion

GE- Gender Equality

PCDP- Pastoralist Community Development Project

PIM-Project Implementation Manual

KII: Key Informative Interview

SD: Standard Deviation

CHAPTER ONE

1. INTRODUCTION

1.1 Background of the Study

Sustainability is of paramount significance (Durdyev et al., 2018). Businesses worldwide are adopting the sustainability principles in their core skills and business processes due to the increased international societal and regulatory pressure (Gomes and da Silva (2005); Labus chagne et al. (2005); Collins (2011)). Moreover, incorporating sustainability in business has heightened the attention (Stewart et al., 2016) and many industries are moving towards sustainable development as a result of negative effects on the environment (Adams and Frost (2008); Ali et al. (2016); Cai and Li (2018); Aghaegbuna et al. (2020); Hermundsdottir and Aspelund (2021)). Similarly, sustainability principles have been embraced by many organizations in their business cases due to its increasing demand in the construction industry (Mavi and Standing (2018); Pham et al. (2020)). The interest on sustainability development concept has flourished significantly, globally (Abidin (2010); Eweje and Alakavuklar (2014); Goni et al. (2015); Ali et al. (2016); Durdyev et al. (2018); Rubino and Veltri (2020)). According to Durdyev et al. (2018), sustainable activities have increased due to its popularity over the last decade. Sustainability in project operations is among the most important matters today to address (Chawla et al., 2018). This increased focus on sustainability has impacted the process of conception, planning, execution and evaluation of projects in business; project management (PM) activities (Ali et al. (2016); Chawla et al. (2018)). In addition, firms all over the world are seeing sustainability issues as an opportunity to capture the potential business (Ali et al., 2016) and the sustainability research trend has increased in various fields (Goni et al., 2015). As mentioned by Chawla et al. (2018), sustainability has been a focal point of research in relation to the project. Additionally, sustainability innovations can lead to win-win circumstances for an organization (Hermundsdottir and Aspelund, 2021).

Project management: On the other hand, projects play a critical role in the sustainable development of businesses (Silvius and de Graaf, 2019). Sustainable project management allows organizations to interconnect sustainability principles into the project management (PM) activities, resulting in business success, eventually (Chofreh et al., 2019). According to various studies, PM has escalated abruptly in the last decade. Additionally, there is still a rising demand and interest in this respective

field (Crawford (2005); Thomas and Mengel (2008); Padalkar and Gopinath (2016); Gurjar (2016); Zwikael and Smyrk (2019)). Moreover, the strategic value of PM enables the integration of environmental and social objectives into the project's lifecycle approach (Labuschagne et al., 2005). Likewise, the strategic value can be reflected in connection with social, environmental, and economic dimensions as the characteristics of sustainability (Kivilä et al., 2017).

Construction industry:-The construction industry is vital for sustainable growth (Sev (2009); Serpell et al. (2013); Gan et al. (2015)). Sustainability is becoming a substantial reflection for construction projects, worldwide (Pearce, 2008). According to Du Plessis (2007), the construction is seen as a specific phase of a project cycle. Sustainable construction is a path of contribution to achieve sustainable development for the construction industry (Shafii et al. (2006); Sev (2009); Abidin (2010)). For sustainable development in construction industry, promoting environmental protection, economic growth and social progress are pivotal (Heravi et al., 2015). Furthermore, extraordinary opportunities have been created for embracing the sustainable construction as a result of rapid urbanization in developing countries (Gan et al., 2015). In addition, green building is a propitious means of contributing the sustainable development in construction industry and its importance has increased recently (Darko and Chan, 2017). In short, to meet the sustainability goals, green building initiatives have been created (Karji et al., 2020). The above information shows the increasing importance of the fields of sustainability, PM and the role of construction industry. In the following sub-section, the necessities to deal with sustainability issues are discussed and the objectives of the research are highlighted to further elevate their significance.

1.2. STATEMENT PROBLEM

There are several challenges which have played their part in necessitating the urge towards sustainable development. These significant issues are pointed out below.

Environmental aspect**:-**Climate change is a substantial environmental hazard as a result of fossil-fuel usage, globally (Robinson (2012); Portney (2015); Yoshino et al. (2019); Ziolo and Sergi (2019)) and is viewed as a risk to the organization (Adams and Frost, 2008). Sustainability issues have seen risinginterest and attention in the last few decades (Ali et al., 2016). Climate change has additionally propelled the sustainability agenda (Collins (2011); Casey and Sieber (2016); Nielsen et al. (2016); Amankwah-Amoah and Syllias (2020); Karji et al. (2020)). The world is not near to the environmental sustainability and it is getting worse (Howes et al., 2017). The greenhouse gas

emissions are rising and have a negative effect worldwide; not isolated to simply one country or continent (Howes et al. (2017); Ismael and Shealy (2018); Yoshino et al. (2019)). The greenhouse gas emissions per capita produced in Kuwait is 53% more than in United States (Ismael and Shealy, 2018). Moreover, sustainability affairs are matter of concern for businesses as a result of increased global trade and growing strain on natural resources (Casey and Sieber (2016); Ali et al. (2016); Cai and Li (2018); Hermundsdottir and Aspelund (2021)).

Negative effects of construction industry**:**Furthermore, the construction has an enormous impact on the environment and society all over the world (Du Plessis (2007); Sev (2009); Collins (2011); Gan et al. (2015); Karji et al. (2020)). Cement production is the largest source of greenhouse gas emissions (Shafii et al., 2006). Likewise, construction is responsible for the greenhouse gas emissions and consumes half of all global resources (Sev, 2009). The negative effects of current construction methods can no longer be rejected (Pearce, 2008). Sustainability principles have not been comprehended fully by the construction experts and hardly any have converted it into the action (Abidin (2010); Collins (2011)). In addition, construction industry promotes non-sustainable activities and have significant impact on the built environment including the environmental, social and economic aspects (Gomes and da Silva (2005); Shafii et al. (2006); Du Plessis (2007); Robichaud and Anantatmula (2011); Darko and Chan (2017); Aghaegbuna et al. (2020)). In brief, construction activities have detrimental effects on the natural environment (Sev (2009); Collins (2011); Karji et al. (2020)). The objective of reaching green goals are still lagging behind using the existing sustainability practice in construction industry (Karji et al., 2020).

Lack of sustainability in project management**: -**Meanwhile, integrating sustainability into the sustainable PM concept has been emphasized as a need in numerous studies (Chofreh et al., 2019). In Middle East and Northern African region, it has become a necessity for increasing the adoption of sustainable construction activities for attaining sustainable development goals (Ismael and Shealy, 2018). Furthermore, the existing PM frameworks do not consider the social and environmental aspects of sustainability, effectively (Labuschagne et al. (2005); Aarseth et al. (2017)). Similarly, traditional PM is notappropriate for managing projects; necessitating the sustainability principles to be integrated into the PM concept (Chofreh et al., 2019). Likewise, conventional construction practices focus on cost, quality and performance concerns while

sustainable constructions adds minimization of resource consumption, environmental degradation and a healthy built environment (Sev, 2009).

Lack of sustainable development**:** -Nevertheless, sustainable development is a challenge (Aarseth et al., 2017). Accomplishment of sustainable development is a common problem encountered by developing countries (Shen et al., 2018). The implementation of sustainable solutions is not simple (Støre-Valen and Buser, 2019) and is still insufficient in developing countries (Durdyev et al., 2018). According to Abidin (2010), the green movement is still at its beginning in Malaysia. Likewise, Asia is far behind in the field of green energy as the fossil energy utilization still dominates in the region (Yoshino et al., 2019). Similarly, in developing countries, the perception of sustainability concept is deficient in the construction industry (Pham et al., 2020).

There are certain factors that hamper the implementation of sustainability. For example, sustainability is not viewed as a priority (Gomes and da Silva (2005); Serpell et al. (2013); Aleixo et al. (2018)). The social characteristics of sustainability are considered seldom (Labuschagne et al., 2005). In addition, sustainable construction outcomes can appear overly risky (Ismael and Shealy, 2018). The importance of sustainability concept and its associated research directions explored studies are inadequate (Chofreh et al., 2019). Moreover, the objectives of sustainable development are not efficiently addressed by current project lifecycle methodologies in developing countries (Gomes and da Silva (2005); Labuschagne et al. (2005)). The abstractness of the objectives linked to sustainable developments goals can be challenging to constructional experts; regarding how to obtain them (Ismael and Shealy, 2018).

Moreover, from my own working experience, sustainability is still not fully embraced in all businesses; especially in hotels and restaurants facilities in which at least I have worked. For example, not implementing energy saving applications or not efficiently recycling the waste are some typical examples. This inspires me to find the barriers which have hindered the incorporation of sustainability principles from the already existed research and the industries professionals' experiences, and how they can be overcome. This will help in integration of sustainability from the start of a project till its termination; a lifecycle perspective. Using the previous studies, experts' knowledge and from my own reflections and inspiration towards sustainability, I intend to perform the research in finding the different barriers and drivers for the implementation of sustainable development. This headed to the formation of the research questions in the upcoming sub-section.

1.3. OBJECTIVES OF THE STUDY

1.3.1. General Objectives of the Study

The objective of this research study is to find the factors that hamper the implementation of sustainability concept; aiming towards the understanding of how the organizations can overcome the barriers to carry on the sustainable development **of green project management practice**. As such, the main research question itself. To answer this main research question, sub-questions as the following will be analyzed;

1.3.2. Specific Objectives of the Study

- To identify the barriers of green project managements in the study area.
- To justify the green project management practice in the study area.
- To assess and identify the various challenges of the adoption of green project management.
- To determine the advantages and disadvantages of green project management practice.

1.4. The research Questions

RQ1.Whatis thedifferent types ofbarriers that exist?

Thisquestionemphasizedonfindingthenumerousbarrierswhichobstructtheorganizationsto implement the sustainability practices. In addition, these hurdles are highlighted and grouped through various perspectives.

RQ2. What are the various kinds of potential drivers that can overcome the sustainability challenges?

Thepurposeofthisquestionistoaccentuatethepotentialsignificantsustainabilitydriversthat can help in overcoming the sustainability barriers; accelerating the process of sustainable development.

RQ3. How are these barriers and drivers affecting the organization's financial resources?

Thespotlightofthisquestionistheeconomicalaspectofsustainability.Itaimstoseekoutthe key sustainability elements impacting the organization's financial assets either negatively or positively.

These sub-questions show a logical way leading to the solution of the main research question with the purpose of promoting sustainability in an organization.

1.5. Significance of the Study

The study will find that wheat production and productivity in Ethiopia has shown an increasing rate, especially from 2018 to 2024. This makes Ethiopia one of the largest greenprojectpractices. However, adoption and barrier productivity is relatively small by global standards. The main reason is that mostly subsistence by small-scale project through production. Additionally, existing wheat production and marketing system is exacerbated by constraints which have their own influence on decreasing yield of adoption. But, in opposite to the constraints, there are also important opportunities which motivate wheat production and marketing trends of green project practices.

In summary, the study highlights the importance of green project management practice in Ethiopia, and the need for attention from responsible bodies on the expansion of infrastructure, awareness creation through training on value-adding activities, and other measures to improve the yield. The level of production and sale is varied between countries. This study will be importance in terms of the quantitative and qualitative data is generated, and the observations and recommendations made. The great relevance will be the strategic planning on production of the country, and also provides valuable information in reducing the supply gaps in enrolment, and in increasing production rates. The methodology and findings will also give directions for future investigations on the area of concern for all relevant stakeholders.

1.6 Scope of the study

The scope of study mainly lies on the organizational perspective to identify and overcome the barriers for sustainable development. Barriers in the form of organizational factors (internal) to standards, frameworks, government laws and regulations (external) are all part of this research. The study focuses on all three pillars of sustainability, that is, economic, environmental and social aspects. Additionally, these research questions facilitate in realizing the common principles involved in PM to achieve the sustainable development goals (SDGs) by United Nations (2015) and to promote the European Green Deal, 2019 by European Union.

Moreover, this research study also serves the purpose of illuminating the areas in PM; incorporating the sustainable practices to increase the returns on investment and positive impact on an organization and the society. Furthermore, it explores the stumbling blocks faced by the organizations to keep on with sustainable progression. In brief, it justifies the need to perform this

research study due to lack of clear information from existing studies regarding overcoming the barriers for sustainable development. As mentioned by Ziolo and Sergi (2019), the investments in green infrastructure projects can be facilitated by recognizing the challenges related to sustainability. Additionally, to achieve long-term profitable business, it is important to reflect on and address the sustainability issues (Chawla et al., 2018).

To ensure the quality of research, interviews are conducted with experts working in different organizations. The initial goal is to gather the experiences and input from as many professionals as possible to compare the results of the literature findings with the industrial insight, eventually. This will serve as a basis for understanding the role of sustainability and its associated challenges from an organizational perspective. Based on the results from the literature and conducted interviews, the research questions are analyzed, answered and discussed.

1.7 Limitation of the study

Supply chain perspective including the transportation, is not considered in this **study, focusing on the internal** characteristics of a firm only. The reason for this restriction is to make sure that the research is performed merely from an organization's internal point of view. This resulted in purely organizational factors only, along with government laws and regulations associated with implementation of sustainability. In similar manner, different types of green technologies and their associated pros and cons are also not part of this research.

Moreover, the **interviews are conducted**, to perform the physical interviews in current circumstances. Businesses are busy in handling this unfortunate scenario to avoid severe economic losses and health and safety of their employees as well. For that reason, it i**s decided to conduct interviews,** getting in touch with the interviewees physically; saving time and safekeeping both **myself** and the interview objects too in this improper circumstances **like time and cost limitation**. Nonetheless, this does not affect the outcomes of this study as the quality of the work is maintained throughout the research process.

1.8. Organization of the study

This will the preliminary data based on the research questions. It will mainly focused on primary data obtained from all available KII (key informative Interview), FGD (focus group discussion) and secondary data from documents of books, citations, journals, internets and some of the past research studies as well as the qualitative data collected from all sampled wheat production from

Afar national Office. The huge quantitative data gathered through survey from from all sampled area are under processing, and will be included in the final result after rigorous statistical analyses.

This research thesis will has five chapters. The first chapter deals with introduction, covering background of the study, statement of the problem, objectives, research questions, scope and limitations and significance of the study. The second chapter reviews all available and relevant literature to formulate the conceptual framework of this study, while the third chapter explains the research methodology followed to generate necessary data. The fourth chapter explains and discusses the results of analysis of the data obtained from KII, FGD, various documents, and the interpretations and inferences on qualitative data obtained through focused group discussions with groups of Wheat business farmers and investors from sample area. The fifth chapter contains summary and conclusions based on the analyses, along with policy recommendations.

CHAPTER TWO

2. LITERATURE REVIEWS

The many literatures that were reviewed for this study are covered in this chapter. The literature review begins by introducing the idea of green buildings, outlining its history, and outlining its guiding principles. Second, there is a discussion of the advantages and difficulties of green construction. Green buildings, Green Building concepts, and what they consist of are the main topics of discussion. Moreover, explored are the variousgreenbuildingratingattributesthatarebeingused aroundtheworld, aswellastheideaof a green building rating tool.

2.1. GREEN BUILDING

Brunt land coined the phrase "sustainable development" in 1987. Since then, a number of significant steps have been done to advance environmental awareness and sustainability goals (ZainulAbidin, 2008). Government, businesses, organizations, and individuals have encouraged the growing concern for environmental awareness (Ofori et al., 2000). The whole construction sector is refocusing on adopting steps to lessen the negative environmental effects of construction-related operations (Roy and Gupta, 2008). The Environmental Protection Agency (EPA) of the

United States defines a "green building"as one that is planned, constructed, managed, maintained, or renovated with the intention of minimizing the negative effects on the environment and improving staff productivity (Mehta and Porwal, 2013). This building is also sometimes referred to as sustainable or "high performance."

Sustainable construction includes the building of green structures. Kibert (2008) claims that green building practices address the ecological, social, and economic concerns of a building in the context of its neighborhood. From preconstruction to building disposal, sustainable building practices are used throughout the whole construction life cycle. By designingand administeringa buildingproject in accordance with the contract instrument, such construction attempted to lessen the environmental impact of the practice (Glavinich, 2008).

2.2.CONSTRUCTIONOFGREENPROJECTS

The construction industry should surely adopt the sustainability concept in order toachieve sustainable development, as it has significant direct and indirect ties with the various components of sustainable development, including the economic, social, and environmental ones (Bourdeau, 1999). This assertion is backed up by a number of arguments.

One factor is that the building sector uses a lot of resources, therefore raising its standards has a big impact on the sustainabilityof the entire society (Huovila & Koskela, 1998). For instance, green buildings consume 36% less energy than traditional structures, which also results in a decrease in CO2 emissions (Holowka, 2007). Another justification is put up in certain literature and takes the built environment—the final result of the construction industry—into account. The majority of human activity occurs in the built environment, which has a significant impact on the sustainability of the entire society by boosting residents' productivity and health (Mills & Glass, 2009). Holowka (2007) asserts that residentsof greenbuildingshavea40–60% reductionincold,flu,and asthmaattacks.The constructed environment also includes one of the main supports of economic development which are infrastructures and buildings (Bourdeau, 1999).

Sustainable building techniques must also be used, such as using timber from sustainable sources and recycled materials in concrete construction (CIRIA, 2001). Additionally, the principal contractor and project manager must control soil erosion, river sedimentation, and theproduction

of airbornedust to ensurethat pollution from thework is maintained to aminimum(USGBC,2009).Additionally, thenaturalhabitat shouldbe preservedthrough careful building placement to reduce disruption to the already-existing naturalenvironment (USGBC, 2009). Traditional construction frequently overlooks these factors.

2.2.1. GREENBUILDINGBENEFITS

By recycling their components, green buildings aim to use less resource, use less energy, and emit fewer toxic compounds throughout the course of their lives. It blends in with the localwayoflife,customs,weather,andsurroundings.Greenconstruction may simultaneously enhance human well-being and preserve the ecological balance on both a local and global scale. Additionally, green buildings increase resource utilization effectiveness, operational savings, and workplace productivity (Green Building Index, 2013). The financial advantages of green building include cheaper maintenance and operations expenses, lower maintenance and energy costs, fewer emissions costs, and lower environmental costs (Green Building Index, 2013, Yaman et al, 2011).

2.2.2. DRIVERSOFSUSTAINABLEDESIGNANDCONSTRUCTION

Numerous factors have been identified by studies as strengthening the green construction trend. Rapid adoption of the LEED green building rating system, legislative policies that support it, executive orders, rules, regulations, and policy interventions from the government, advancements in green building technology, environmental impact followed by tenant demand, financial advantages, corporate social responsibility, land use regulations, and urban planning policies, resource depletion and degradation, re- engineering the design process, and product innovation are some of the factors (Abidin, 2010; Augenbroe and Pearce, 2009;Vanegas and Pearce, 2000). Therefore, the need for environmentally sustainable construction or the needs to lower building operatingexpensesmotivategreen buildingprojects.Thesustainabilitymovementisbecomingmore and more active thanks in large part to awareness and information. Du Plessis (2007) contends that without personal commitment, behavioral change is impossible. All the related stakeholders' personal values must be met in order to gain their support. The developers' only interest in the project is its commercial feasibility. Studies have demonstrated that green buildings are economically viable (Hydes& Creech, 2000; Pettifer, 2004; Yates, 2001).

2.3. FACTORSPROMOTING IMPLEMENTATION OFGREEN BUILDING

Factors of green building are a framework of advantages that can be categorized into economic, social, organizational, market and environmental.

2.3.1. EconomicFactors

Economic motivators are elements that can improve the adoption of green building in terms of the financial advantages that green building imposes. Green buildings can result in cheaper annual energy and water costs, according to Gundogan (2012). Ng (2013) backed up this claim by saying that using green construction materials will save operating and maintenance costs. In other words, decreased running costs will boost net revenue, which in turn will improve the value of the facility. Green construction can save more than 250 percent of its initial cost during a 40-year period of use (Ng, 2013).

2.3.2. SocialFactors

The social motivators are the elements that boost occupant productivity, which in turn encourages green building in the construction sector. According to Kats' (2003) research, tenants and occupants prioritize a suitable air temperature and good indoor air quality. Ehmida Abdel Aziz (2011) claims that green buildings include attributes including enhanced air quality, natural ventilation, and day lighting that can enhance quality of life. The productivity and health of building inhabitants have greatly improved because to better ventilation, temperature, and lighting control. Respiratory ailments, allergy symptoms, and asthma symptoms have also decreased (Kats, 2003; Gundogan, 2012).

2.3.3.EnvironmentalFactor

The environmental motivators are one more thing that encourages the use of green buildings. Green building can lessen a detrimental impact on the environment; claim various researches (Howe, 2010; Ehmida Abdel Aziz, 2011; Ng, 2013; Nurul Diyana & Zainul Abidin, 2013). This is due to the characteristics of green buildings, which include reduced construction waste, efficient use of water and energy resources, and sustainable building materials (Howe, 2010). The uses of green resources, indoor environmental quality, and innovation, along with green building design, have a positive impact on the environment (Ehmida Abdel Aziz, 2011; Ng, 2013).

2.3.4. OrganizationalFactor

According to a number of researchers (Gundogan, 2012; Nurul Diyana & Zainul Abidin, 2013), organizational motivations can influence the adoption of green construction practices. An improved public image will be imposed on the construction industry by the development of green practices and strategies that result in a shift in organizationalculture. Additionally, having developers contribute to environmental protection,ecological responsiveness,andsocial responsibilitywill givethemasustainedcompetitive advantage (Gundogan, 2012).

2.3.5. MarketFactor

Lastly, market drivers can encourage the use of green building practices. Gundogan(2012) asserts that the green construction movement is spreading throughout the world. Furthermore, numerous nations are developing and implementing green building certification standards and systems. The market for green buildings is impacted by this trend. In other words, improved environmental performance through moreenvironmentally friendly products and methods enables construction firms to employ a different tactic to take advantage of their specialized and advantageous positions in sustainable market areas.

2.4. CHALLENGESINGREENBUILDINGPROJECTS

Highercostsforgreenbuildingpracticesand materials Construction costs for green projects are typically higher than those for conventional projects. Capital expenditures for green initiatives are, on average, 1 to 25% more expensive, according to a study by Tagaza and Wilson (2004). Due to the intricacy of the designs and the cost of the modeling required to include green practices into projects, the costs are greater (Zhang et al., 2011). Utilizing green construction techniques and using green materials are also connected with higher prices (Hwang and Tan, 2010). According to Zhang et al. (2011), employing green building materials will cost you 3–4% more than usingtraditionalones.Someeco-friendlymaterialsareconsiderablymoreexpensive than their traditional counterparts; compressed wheat board, for example, is nearly ten times as expensive as regular plywood (Hwang and Tan, 2010).

2.4.1. Risk due to different contract forms of project delivery

According to Tagaza and Wilson(2004),the contract type chosen for the project'sdelivery had a significant impact on the development and implementation of a green design. The specifics of a fullyintegrated green design must be included in the sort ofcontract utilized in green projects. If the design is locked before being fully developed, this causes a problem. If green elements are

included at a later stage, several revisions on a large scale are anticipated, increasing the cost of the project as a whole (Hwang and Tan, 2010).

2.4.1. Longapprovalprocessfornewgreentechnologiesandrecycledmaterials

The current state of the industry shows that planning could take a while becausepermitting the use of new green technology and recycled materials can take some time (Tagaza and Wilson, 2004). Similar studies by Eisenberg et al. (2002) and Zhang et al. (2011) demonstrate that more time is anticipated in order to secure approval. Project managers face a problem since they must create the schedule and authorize progress paymentstosuppliers andcontractorsthroughout aprotracted approvalprocess(Pettersen, 1999; Ling, 2003).

2.4.2.Unfamiliaritywithgreentechnologies

Numerous studies have confirmed that using green technologies can provide difficulties forcontractors, clients, anddevelopers. Insufficient technical experience andunfamiliarity with the goods, materials, system, or design are two causes mentioned by Eisenberg et al. (2012). The fundamental issue is that green technologies differ from conventional technology and are frequently more sophisticated (Tagaza and Wilson, 2004). Zhou et al. (2011)provided confirmation ofthis. Accordingto Pettersen (1999; Ling(2003), aproject manager must deliver the project with the requisite performance that the client has stipulated, and using green technology may not produce the desired performance.

2.4.3. Greatercommunicationrequiredamongstprojectteammembers

The project manager must successfully supervise several suppliers, subcontractors, and team members. Forthe green project, communication is veryimportant in orderto express to the team members the sustainable behaviors expected of them. While it's crucial for team members to remain engaged, Tagaza and Wilson (2004) observed that as projects advanced and the recycling skips were discovered to include a variety of items, sub- contractors' initial enthusiasm for sorting waste materials faded.

2.4.4. Moretimerequiredtoimplementgreenconstructionpracticesonsite

To make sure that sustainable practices are used on-site, project managers are typically expected to conduct random checks and site visits (Tagaza and Wilson, 2004). This is crucial because when deadlines are tight, employees could opt out of time-consuming sustainable measures.

2.4.5. PRINCIPLESOFGREENBUILDINGPRACTICE

The seven fundamental principles of green buildings according to different sources suchas (El Yamany et al, 2016) and (Johnson, 2005) are:

2.4.5. OptimizeSitePotential

Proper site selection, which takes into account the reuse of existing structures, is the first step in creating sustainable buildings. The surrounding ecosystems, transit options, and a building's energy efficiency are all impacted by the placement, orientation, and landscaping of the structure. Regardless of the level of development, smart growth principles should be incorporated into the project development process. For a project to be successful, site design and sustainable design must be integrated, whether creating a new building or renovating an old one.

2.4.6. OptimizeEnergy

Use Measures to reduce energy consumption are frequently used in green buildings. This includes operating energy, which is used to provide services like heating and power for equipment, as well as embodied energy, which is used to extract, process, transport, and install building materials. Demand reduction, efficiency improvement, and the use of renewable energy sources are crucial. To reduce operating energy use, designers also use details that minimize air leakage through the building envelope. Passive measures like orientation, air tightness, solar shading, thermal mass, and natural ventilation must be taken into account from the outset; they must work with the natural environment rather than against it.

2.4.6. ProtectandConserve Water

Primary goals of sustainable building include lowering water usage and preserving water quality. One serious problem with water use is that, in many places, the aquifer that supplies the water cannot keep up with the demand. Facilities should rely more on water that is gathered, used, filtered, and reused on-site to the greatest extent possible. The local aquifer won't be put under as much stress if non-sewage and gray water are used for on- site purposes like site irrigation. A resource that is getting harder to find is fresh water. A sustainable structure should use water wisely, decrease, control, and/or treat site runoff, and, when practical, reuse or recycle water for on-site use.

2.4.7.UseEnvironmentallyPreferableProducts

A sustainable building must be made of materials that have been responsibly and ethically created and have a minimum life-cycle impact on the environment, society, and economy, including

climate change, resource depletion, and human toxicity. Sustainable materials increase worker safety and health, minimize disposal costs, and help accomplish sustainability goals since they have less of an impact on human and environmental health. Unfortunately,theseitemsmighthaveasomewhathighercapitalcost,butwemust always weigh that against the cost over their entire lifespan and the value of the building's history throughout their entire lifespan.

2.4.8. EnhanceIndoorEnvironmentalQuality (IEQ)

The health, comfort, and productivity of building occupants are significantly impacted by the indoor environmental quality of the space. A sustainable structure, among other qualities, makes the most of natural light, has proper ventilation, acoustic and moisture control, and stays away from materials that emit a lot of volatile organic compounds and ionizing radiation.

2.5. Resourcesconservation andSustainableWasteManagement

One of the main principles of green construction methods is resource conservation. There are numerous strategies to save resources when building. Construction waste reductioncan lessen the burden on landfills and resources. Construction waste management procedures begin with source reduction and on-site waste separation and end with recycling and reuse of the materials (either on or off site).

2.5.1. OptimizeOperationalandMaintenance Practices

No matter how environmentally friendly a building may have been when it was designed and built, it can only stay that way if it is used appropriately and maintained. Maintaining the green criteria established at the project's inception will be made easier by including operations and maintenance (O&M) workers in the planning and development process. The O&M phase of a building's life incorporates all facet of green building.

2.5.2.STRATEGIESFORGREENBUILDINGMOTIVATORS

Many studies have suggested strategies and policies to enhance the efficiency of motivators forthe implementation ofgreen buildings. Thesignificant ones aresummed up below:

2.5.3. ManagementSupport

It is noteworthy that the government plays the biggest part in inspiring the stakeholders to acceptandapplytheconceptofgreenbuilding.Makingpoliciestoencouragegreenbuilding assessment is one of the actions the government may do to help green buildings. Government building projects

should be converted into green buildings, financialincentivesystems should beput in place, and local governments should providetax breaks for green buildings (Abidin & Powmya, 2014; Bond, 2010; Deutsche, 2016; Gündoan, 2012; Hankinson & Breytenbach, 2012; Mosly, 2015; Shi, 2009; Yen et al., 2016).

2.5.4. EducationandDevelopment

Positive evidence of stakeholders' awareness of green building incentives can be shown in theconcept'swidespreadadoptionandapplication.Severalearlierstudieshavehighlighted the significance of this strategy, which includes developing designers, enhancing knowledge of sustainable design, expanding the range of products and materials,educating clients and utilizing rating tools, enhancing research collaborations on sustainability issues among academic staff, students, and outsiders, and educating those working in the construction industry through workshops and seminars (Abidin &Powmya, 2014; Alrashed & Asi, 2014).

2.5.5. ContributionofPrivateSector

The business sector is crucial in encouraging stakeholders to embrace and use green buildings, even if the government has the biggest influence in this area (Olubunmi et al., 2016).Forinstance,theprivatesectormightprovidewaterandelectricitysubsidiestohelp with the cost of energy and water utilities (Mosly, 2015; Song & Pea-Mora, 2012).).

2.6. RoleofGreenBuildingBodies

Encouragement of stakeholders in the built environment to embrace green building techniques is crucial, and green building organizations like "Green Building Councils" playacrucial partin this (D. O.Nduka&Sotunbo, 2014). Without assistanceordirection, it is incredibly challenging for stakeholders to implement green buildings successfully (Aktas & Ozorhon, 2015). To encourage and inspire stakeholders in the construction industrytoincorporatethegreenbuildingconceptintotheirdesigns,manynationsestablished local green building rating systems. One of the primary drivers of the development of green buildings is these rating systems (Darko, Zhang, et al., 2017).

2.6.1.GREENBUILDINGCOUNCILSANDRATINGSYSTEM

The Green Building Council (GBC) is a non-profit membership organization that seeks to change the construction industry toward sustainability by promoting the use of green building best practices. There are currently more than 20 fully accredited green building councils, and many

more are in various phases of development (Malanca, 2010). The first commercial green building rating instrument, known as BREEAM (British Research Establishment Environmental Assessment Method), was introduced by the British Research Establishment in 1990). Following this came Green Star in Australia, CASBEE (Comprehensive Assessment System for Building Environmental Efficiency) in Japan, LEED (Leadership in Energy and Environmental Design) in the United States in 2012, and a number of additional nation-specific tools in Asia and Europe. (Malanca, 2010).

2.7.Sustainable Project Management Conceptual Framework

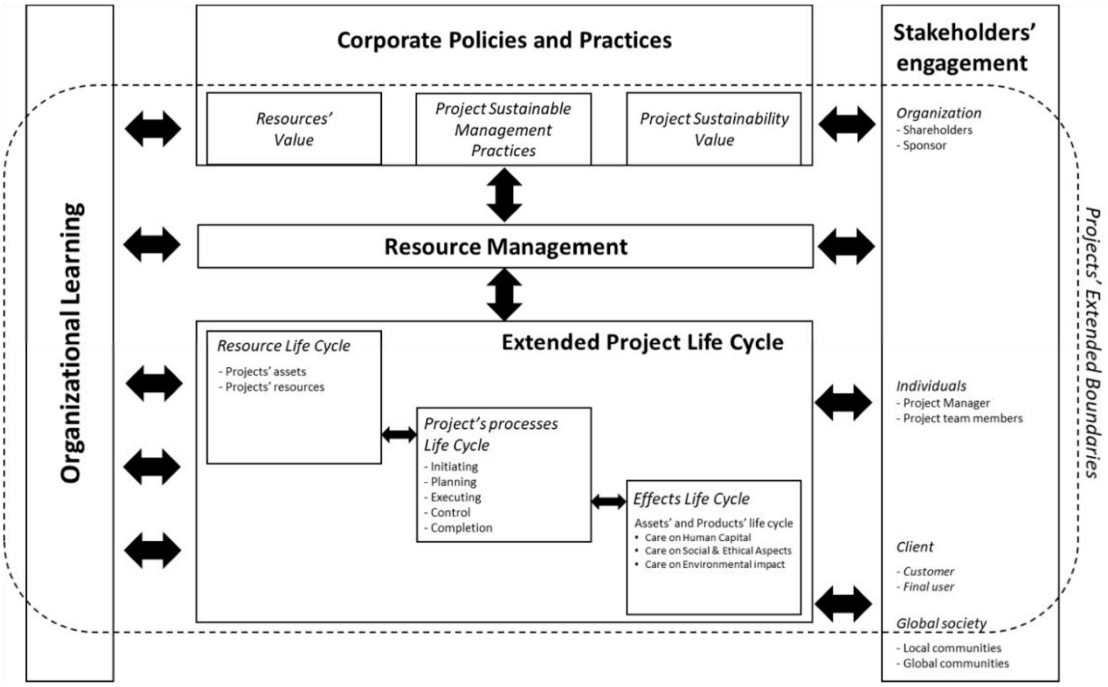


Figure 1. Sustainable project management framework.Source: Own observation

In my opinion, a definition of sustainable project management should include the concepts contained in the developed framework, starting from its alignment with corporate policies for sustainability. Therefore, I propose the following definition: "Sustainable project management is the managerial practice aiming at pursuing project objectives by maximizing economic, social, and environmental benefits through the proactive involvement of stakeholders, the consideration of the extended life cycle of resources, processes, and effects, and continuous organizational learning."

CHAPTER THREE

3.THE RESEARCH METHODOLOGY AND DESIGN

The research methodology section is crucial since it will outline the precise steps to be taken in order to collect, organize, and analyze the information on green building practices. The research technique, study design, population and sample, data collecting, quantitative data analysis, qualitative data analysis, ethical consideration, and validation procedure are the main sub-sections to be covered in the research methodology.

3.1. Research Method

Both descriptive and explanatory research methodologies are used in this study. To gather the required data, it was structured with a site survey, interview, questionnaires, document review, and case study.

Data from both the qualitative and quantitative domains are combined in a mixed approach. Professional attitudes and ideas about green building concepts and implementation challenges are included in the qualitative data. For the quantitative approach, statistical analysis was used to determine the factors that identify green buildings and the usage of green principles on the sampled LEED certified green building in Samara-Logiya.

3.2. Research Design

A sequential research approach was use in the study. The scientific method use in the design is characterize by gathering and analyzing quantitative data first, follow by gathering and analyzing qualitative data. Through the use of questionnaires and interviews, the two types of data were acquired. The main objective of this study design is to use qualitative data to help explain and comprehend the conclusions of the quantitative analysis part. To gather the required data, it is create with a site survey, interview, questionnaires, document review, and case study.

3.3. DATA TYPE AND SOURCE

The research used both primary and secondary data collection methods as a tool to gather the necessary information.

3.3.1. Primary Data

To get their thoughts on the challenges, the significance of green building components, and the demands with regard to the green building practice in a particular project, construction experts were consulted for primary data.

3.3.2. Secondary Data

Secondary data was gathered from various websites, books, and journals to include local and international literature on the idea of green building. To better understand the current state of the chosen building, architectural layouts, utilities, and infrastructure maps were gathered from a variety of sources, including property managers, consulting firms, and contractors that were in charge of that specific building.

3.4. DATACOLLECTIONMETHOD

Through site surveys, interviews, questionnaires, and the evaluation of pertinent documents, all the data required to carry out the study was acquire.

3.4.1. Questionnaires

To improve the effectiveness and accuracy of the data, a combination of open-ended and closed-ended questions was use.

To increase efficiency and dependability of the data, the study use questionnaires with both closed- and open-ended questions to collect information from the sampled participants. The purpose of this strategy was to compare the interviewees' responses, which indicate their personal experiences, with the information acquire from the theoretical materials. This technique of data collecting was chose since it made it simple and affordable for us to gather information from a sizable sample of 204 respondents. Because the questionnaire was standardizing, respondents was able to provide measurable responses on the subject. The open-ended questions were crucial because they yield data essential for enhancing the qualitative aspect of the study.

The purpose of the survey questionnaire employ in the study was to collect the precise sets of data requires addressing the research issues. The demographic profile of the respondents was gathered

in the questionnaire's first section. The occupation and work history of the respondents was among the demographic factors. The second part of the questionnaire focuses on green buildings in general as well as the biggest obstacles to their adaptation. The category of independent variables for the study was supply in this part. The list of independent variables for the adoption of green construction practices was include hazards, financial concerns, design codes and standards, materials and equipment, human resources, coordination, planning, and scheduling (Larsen, Shen, Lindhard and Brunoe, 2015). The third section of the questionnaire capture the responses on the relevance level of potential green building rating attributes in Samara-Logiya context. The last section of the assessment had given the respondents the opportunity to offer solutions and recommendations were base on the implications and recommendations for future green building projects. The building managers, site engineers, and architects who were chosen for the interviews were used to better understand the difficulties surrounding the implementation of green buildings. The interviews were semi-structured. These interviews were free-form and mostly targeted at seasoned workers.

3.4.2. Site Survey

This technique was use to monitor the current situation of the research area and was carry out by going to the chose building to independently evaluate the present state in accordance with green building principles. To compare the existing building with those of green building principles, a site survey checklist was create that outlines green building elements such as energy consumption, material, water efficiency, waste management, and indoor ventilation and natural lighting. Field notes and a digital camera was utilize to record crucial information that highlighted the area's actual conditions.

3.5. Case Study Method

This study employs a case study strategy because it is beneficial to conduct a thorough analysis of a local best exemplary green building in order to comprehend genuine practice in the Samara-Logiya setting. The Samara Garden, one of only two LEED-certified green buildings in Samara, was deploy as a case study to examine the building practice, its constraints and contextual opportunities, as well as to suggest suitable solutions.

3.6. SAMPLE AND SAMPLING PROCEDURE

Purposive sampling was use to find the case study's target building. It is a form of non- probability sampling technique where the researcher chooses the samples based on his or her own discretion. Samara Garden was chose for evaluation out of the only two LEED-certified green buildings in Samara.

Respondents in the consulting offices were identified by means of purposive sampling. From the data gain from the Ministry of Urban Development and Construction, Ethiopia in 2024, there are 346 active and registered construction companies. Out of the 16 construction companies, 13 companies were registered under level one category. For this study only level one consultancy will take because broad experience and extensive knowledge in the construction industry of Ethiopia was need for reliable data collection. From the level 1 consultancies currently working in Samara, a total of 6 consulting offices representing 25% of the total identified 13 construction companies was select. These firms was select from three sub-cities; Logiya, sub-city, so that it could be easier to access and collect the data with the given time frame. Within each consulting offices, 4 questionnaires were distributed for the architects, engineers, quantity surveyors and those in managerial position or design heads in order to get the opinions of all those who partake in any architectural projects. Therefore, a total of 204 questionnaires were distributed for 26 construction companies.

3.7. DATA ANALYSIS METHOD

The analysis was conducted using a combination of descriptive statistics and content analysis. The **processes was** rigorously manage to prevent unintentional data editing or manipulation, which could have compromised the reliability of the findings.

3.7.1. Descriptive statistics

In descriptive statistics, a set of data is arranged, summarize, and process in order to obtain and interpret the data's meanin**gful core (Keller & Warrack, 201**3). This process makes it possible to compare numerous variables and give each one a different level of priority. Frequencies, percentages, mean values, and mean ranks was all include in the descriptive analyses use in this study.

3.7.2. Content analysis

Data from the open-ended survey questions **was analyzed** using content analysis. "Any qualitative data reduction and sense-making activity that takes a volume of qualitative material and strives to discover fundamental consistencies and meanings" is referred to **as content analysis (Patton 201**2). Each data point can only be given to one category since the data is arranged according to precisely defined context-specific categories (Bo**rdens & Abbot, 201**6; Fellows & Liu, **201**7).

3.8. ETHICAL CONSIDERATIONS

All-important guidelines and rules for behavior that **set apart right from wrong will take** into account. All participants should first provide their infor**med consent. The use of inform** consent serves as pro**of that each participant agree** to participate in the study voluntarily and **without compulsion. An inform** conse**nt form, which must be deliver** to participants prior to their partic**ipation in the actual study, will use** to get consent. The confidentiality and anonymity of the participant's personal information is a crucial ethical factor. A variety of techniques was utilize to protect the participants' private information. Addit**ionally, anonymity is maintain** by keeping participant identities a secret from the researcher (Quinlan, Babin, Carr and Griffin 2019).

3.9. VALIDATION PROCESS

From the process design stage on to the analysis, the validation process includes the gathering and evaluation of data in a way that establishes scientific eviden**ce that the selected process was** capable of reliably producing high-quality goods. To guarantee the validity of the entire process, this study adhered to a set of procedures throughout the research phase. In this s**tudy, prospective validation was** us**e to establish write** proof th**at a system performs as intend before the method was** put into place. Initially, the **study goals and objectives were taking** into consideration when selecting the res**earch design. After that, it was confirm** that everyone participating in various procedures, like d**ata collecting and analysis, was** competent. The final **thing that was made sure of was that there was** a continuous monitoring of the processes to ensure that all the activities are under control.

3.10.PRESENTATIONTECHNIQUES

Theexamineddata,results,andproposalswill presentusingsimpletocomprehend and translatable illustrations. Charts, tables, maps, and contextual drawings are self- explanatory and can be use in a way that explains how specific concerns are related to one another.

3.11. Methods of the approach

3.11.1 Quantitative approach

Quantitative research is an approach that uses numerical data to measure and analyze a phenomenon. It involves collecting, organizing, and analyzing data to draw conclusions about the phenomenon being studied.

3.11.2 Qualitative approach

Qualitative research is an approach that focuses on exploring and understanding a phenomenon from the perspective of the people involved. It involves collecting, analyzing, and interpreting data from interviews, focus groups, and other sources.

External challenges	Frequency	Percent	Valid Percent	Cumulative Percent
Government policy	5	22.7	22.7	22.7
Environment	3	13.6	13.6	36.4
Economic inflation	13	59.1	59.1	95.5
other	1	4.5	4.5	100.0
Total	22	100.0	100.0	

4. CHAPTER FOUR

4. RESEARCH FINDINGS AND DISCUSSION

This chapter focuses on presenting the analysis and interpretations of the study based on the data collected from respondents and further discussions of the findings. As it has been mentioned in the previous chapter the data was collected using a questionnaire and semi-structured interview and luckily all the 204 distributed questionnaires were returned properly filled and an interview with the five project experts was carried out successfully as planned. As a result, the response rate of

the study is 100%. To analyze the collected data using the questionnaire in line with the overall objective of the research, a statistical procedure using SPSS version 20 software has been carried out. The data collected from the interview has been analyzed through narrative analysis by transcribing the answers of respondents then presented being triangulated with the results of the quantitative analysis. In this section, analysis of general information like demographic characteristics followed by general issues about project management and the descriptive analysis are presented.

4.1. Demographic characteristics of the respondents

The general information of respondents includes their age, sex, educational level, the field they have studied, their position and years of service in SFP. The responses are presented based on the figures below.

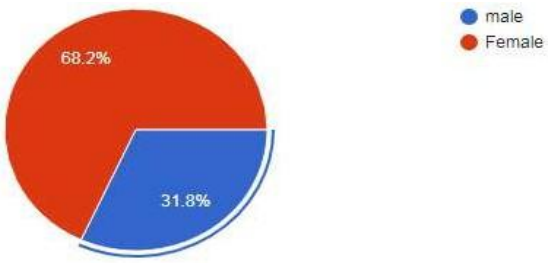


Fig4.1Gender of respondents Source: own survey (2025)

A total of 204 respondents participated in this study. Among the total respondents, 59 (31.8) respondents were male and 145 (68.2%) were female. This can show us the majority of the respondents and people who work in SFP are females.

4.1.1. Age bracket of respondents

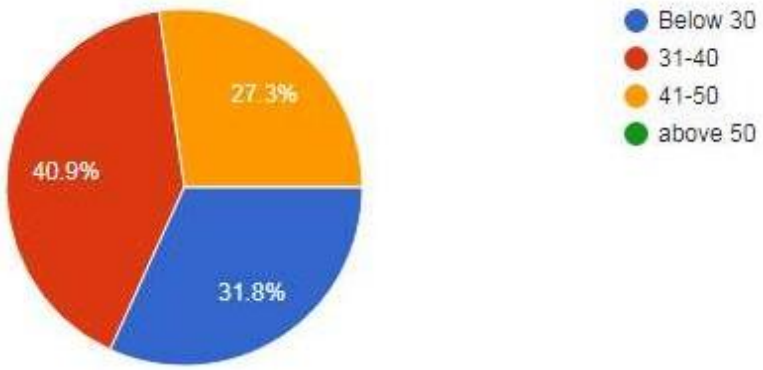


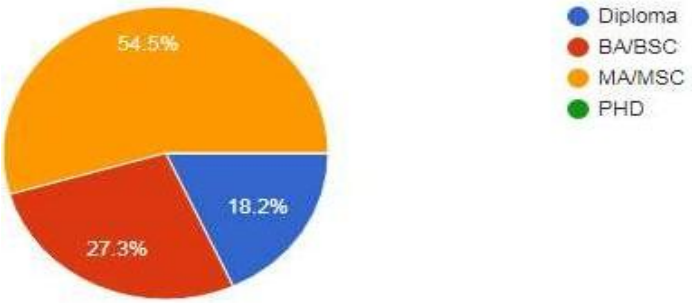
Fig.4.1

Source: own survey (2025)

The study sought to establish the age bracket of the respondents. Results in Figure 4.1.2 demonstrate that 70 (31.8%) of the respondents were aged below 30 years while 89 (40.9%) of the respondents were aged between 31 to 40 years and 45 (27.3) were between 41 and 50 years and none of the respondents were over 50 years of age. The finding implies that the NGO is dominated by young and energetic work force which might have a positive effect on the general work performance.

4.1.2. Education al level of respondents

Fig 4.4, Educational level of respondents;



Source: own survey (2025)

All the respondents fall into three educational levels which are diploma, BA/BSC, and MA/MSC. Out of the 204 respondents, 41 (18.2%) respondents are Diploma holders, 61 (27.3%) respondents are BA/BSC holders and the majority of respondents i.e. 102(54.5%) are MA/MSC holders. The findings indicated letting alone the specific fields they have studied being dominated by an educated work force allows a better communication and a common understanding along the work process which enhances the project performance. Additionally, since 100% of the respondents are above diploma, this might guarantee that the questionnaires are properly understood and filled in.

4.1.3. Field of study and job position

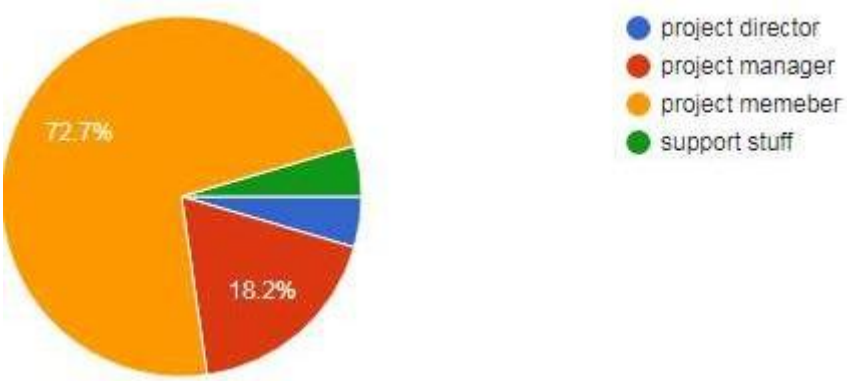


Fig4.5Job positions of respondents;

Source: own survey (2025)

From the total number of respondents who participated in the study, 4 of them holds the director position, another 4 holds the project coordinator position,7 of them are project managers, the majority or 106 of them were project members and team leaders and only 83 respondent was a support staff.

The respondents were also asked to write the fields they have studied to speculate how much they are related to the field of management. Various fields of studies were identified from their responses. Fields like social work and psychology were the most mentioned ones as these fields are required from employees that work closely with orphans and vulnerable children. It is known that social workers and psychologists bring about ongoing behavioral change that delivers safety and stability for children.

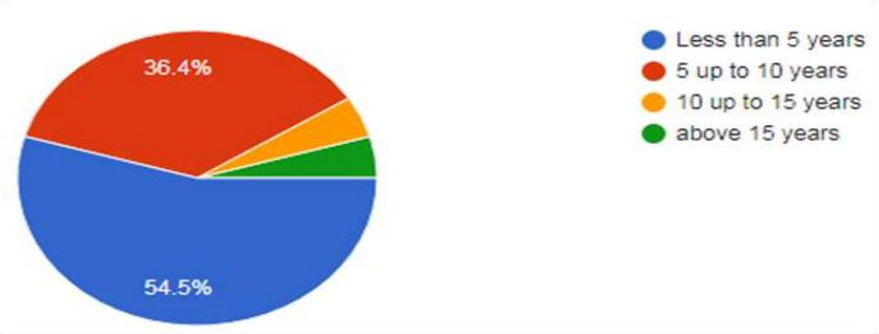
One respondent who works at a project coordinator position has studied project management at master's level and has also an anthropology, development studies, and globalization background. Likewise, the project director has studied development studies and human resource management, and the other two project managers have studied business administration at the master's level in addition to social work. PM4ngo (2020) identified strong project management requires both skills of art relating to human behavior and interactions and skills of science that focus on the technical management of inputs and outputs. The art of project management focuses on the people elements of a project and needs skills that enable project managers to lead, enable, motivate, and communicate. The artistic project manager can direct the team when work challenges shift, realign priorities when the field realities change, resolve conflicts when they arise, and determine which information to communicate when and to whom (PMD pro, 2013).So, the SFP team would be favored in having a smooth management system because most of the workers including the management staff have a background of art like social work, psychology, and development studies.

On the other hand, Project Management (PM) is a discipline that has been identified by many authors as having the potential to effectively deliver organizational changes (PMI, 2013). This change comes through effective management of projects which align with organizational strategic objectives. For this reason, project managers must have PM knowledge and skills. In SFP though the director and some of the management members have a related field of study only the project coordinator has project management specialization this might cause lack of common understanding which affects the technical project management system.

The respondents were also asked to write the fields they have studied to speculate how much they are related to the field of management. Various fields of studies were identified from their responses. Fields like social work and psychology were the most mentioned ones as these fields are required from employees that work closely with orphans and vulnerable children. It is known that social workers and psychologists bring about ongoing behavioral change that delivers safety and stability for children.

4.1.4. Years of experience in SFP

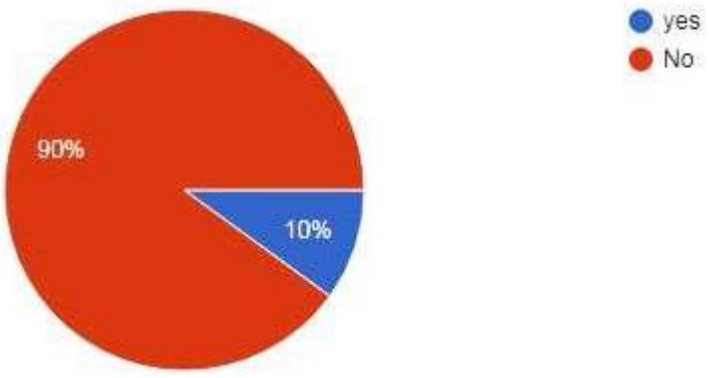
Fig4.7: years of experience



Source: own survey (2025)

Regarding years of experience in SFP, the majority or 54.5% (12 counts) of the respondents had a working experience of between 5-10 years, 2 workers had a working experience of 10 years and above, and 36.4% or (8 counts) had a working experience of fewer than 5 years. Hence the respondents had been in the organization for a long period they are expected to be aware of all the project activities that take place in the workplace. It also means that they had lots of experience regarding the area of interest which is of great help in the reliability of the information given.

4.1.5. General issues of project management



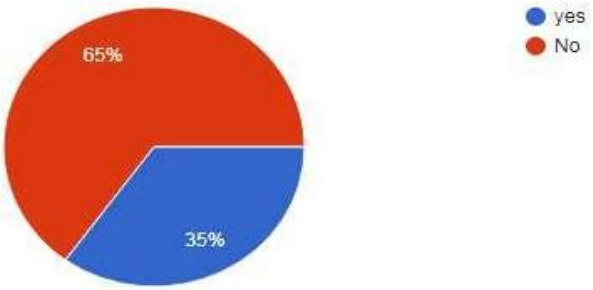
Separate project management department

Fig4.8: Existence of separate project management department; Source: own survey (2025)

Regarding the existence of a separate project management department in the organization, the majority or 90% of the respondents responded that there is no separate project management department in SFP. In this regard, articles identified to accomplish the aims and objectives of the organization, project management offices (PMOs) in NGOs play a critical role in ensuring that projects are carried out successfully and efficiently. In addition to supporting and advising project teams, these PMOs are in charge of organizing, planning, and monitoring initiatives. Due to NGOs' special characteristics, PMOs inside these organizations may encounter particular difficulties, such as resource constraints and an emphasis on social impact. However, a PMO in an NGO may assist the group in achieving its goals and having a beneficial influence on the communities if it works with the appropriate strategy and resources (Abhimanayu & Nani, 2024).

4.1.6. Awareness, training and application of project management knowledge areas in SFP

Fig4.9: Awareness about PM knowledge areas



Source: own survey (2025)

The study found it is valuable to review the employee's level of awareness about project management knowledge areas in general to assess the project management practice in the organization. The respondents were asked if they were aware of project management knowledge areas in their work process where 65% (13 counts) of respondents said they were not aware of the general concept of the project management knowledge areas while 35% (7) respondents stated that they have knowledge about the knowledge areas. The respondents were asked qualitatively to what extent they apply the knowledge areas in their daily work activities. They all stated that even though they do not have deep knowledge about the nine knowledge areas, they apply some of them in their daily work activities without recognizing them. The commonly used knowledge areas mentioned are integration, time, budget, human resource, procurement and stakeholder management.

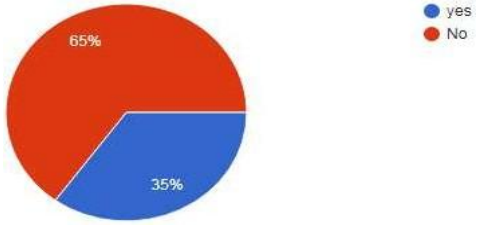


Fig 4.10 Getting access to training on PM

Source: own survey (2025)

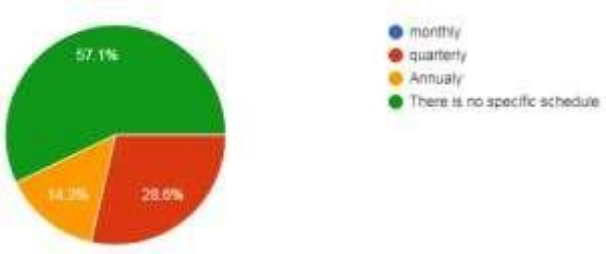


Fig4.11.Number of times they took training

Source: own survey (2025)

Regarding project management training access the respondents were asked whether they had been provided with training that is related to project management. And 133 respondents (65%) out of 22 stated that they hadn't taken any related training so far. On the other hand, 35% (7counts) of respondents said they took pieces of training once, and from the 35%(7) respondents (57.1%)4 of them said there is no specific schedule of training, the other two(28.6%)said they took the training quarterly while the remaining 1(14.3%) respondent took the training annually. From the qualitative study, the researcher found out there were a few times when the management doesn't exactly know how many times project management and related training were given to management staff especially but the training focused on the project successes, not on the technical parts. Julia (2022) said Project management training reinforces the need to encourage unity and a sense of purpose where teams are working towards a common goal. Clear, organized plans improve team collaboration and interest in accomplishing the plan. Giving project management pieces of training to the staff may help in defining everyone's role which eliminates confusion, promotes well-defined goals which improves team

effectiveness, understanding communication definitions keeps the team aligned and focused, and defining Project management tools helps increase efficiency (julia2022).

4.1.7. Project effectiveness

The study also sought to examine the respondent's opinions on the effectiveness of Forever Family Project. 50 % (101 counts) of respondents think the project is effective. 31.8 % (56 counts) of respondents think the project is very effective and 18.2% (47 counts) of respondents think that the project is moderately effective. The results show that 100% of respondents have a positive attitude towards the effectiveness of the project they are involved in. From the qualitative assessment, most of the members correlate success with the quality of the services they give. In the interview, the country director said 'The main objective of this NGO is to break the poverty cycle from these kids and so far from the 65 adults launched (left to live their life independently) only 4 of the mare in low economic conditions, the rest 61adults are living from medium to high class living standard by either by owning a company or being hired in different places of work. On the other hand, seeing them making their own family by fighting their diversified types of family issues is also another biggest success of the SFP. I also have recent information that SFP has 204 grand children found from those adults.

Fig4.1.2, Effectiveness of the project

Source: own survey (2025)

4.2. Analysis of Green project management knowledge areas

In this section of analysis, the practice of project management of Selamta Family Program Forever Family Project is assessed from the view point of project management knowledge areas. To find out the practice of project management, the respondents were asked to give assessment values for their organizational trends based on a 5 point Likert scale. The computed results of frequency, percentage, mean and standard deviations along with the qualitative results are presented in the form of tables and explanations as follows.

Weighted averages (mean value) for the Likert scale is calculated from strongly agree=1 to strongly disagree =5 and interpreted based on the data in the following Table.

Table 4.1. Weighted average for 5 point Likert scale (Likert,1932)

Weighted average	Result	Result interpretation
1-1.79	Strongly disagree	Very negative
1.80-2.59	Disagree	Negative
2.60-3.39	Neutral	Moderate
3.40-4.19	Agree	Positive
4.20-5	Strongly Agree	Very positive

4.2.1. Project integration management

In this section, respondents were asked to choose their level of agreement on the application of project integration management processes of SFP. The following table provides the results.

Table 4.2; Green Project integration management processes

Green Project charter has been developed	Frequency	Percent	Valid Percent	Cumulative Percent	Mean
Strongly disagree	-	-	-	-	
Disagree	-	-	-	-	
Neutral	41	40.9	40.9	40.9	
Agree	112	54.5	54.5	95.5	**3.64**
Strongly agree	51	4.5	4.5	100.0	
Total	204	100.0	100.0		
Integrated project management plan has been developed	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	-	-	-	-	
Disagree	5	4.5	4.5	4.5	
Neutral	20	31.8	31.8	36.4	
Agree	112	54.5	54.5	90.9	
Strongly agree	67	9.1	9.1	100.0	**3.68**

Total	204	100.0	100.0		
There is an effective coordination between project departments	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	-	–	-	--	
Disagree	12	9.1	9.1	9.1	
Neutral	22	27.3	27.3	36.4	
Agree	112	54.5	54.5	90.9	
Strongly agree	58	9.1	9.1	100.0	**3.64**
Total	204	100.0	100.0		
The overall Project progress has been reviewed to meet the project Management plan	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	-	-	-	--	
Disagree	13	9.1	9.1	9.1	
Neutral	38	27.3	27.3	36.4	
Agree	111	54.5	54.5	90.9	**3.64**
Strongly agree	42	9.1	9.1	100.0	
Total	204	100.0	100.0		

The overall Green Project progress has been reported to meet the Green project management plan	Frequency	Percent	Valid Percent	Cumulative Percent	Mean
Strongly disagree	--	-	-	--	3.59
Disagree	4	4.5	4.5	4.5	
Neutral	110	45.5	45.5	50.0	
Agree	48	36.4	36.4	86.4	
Strongly agree	42	13.6	13.6	100.0	
Total	204	100.0	100.0		

Source: own survey (2025)

First, the respondents were asked if a project charter has been developed in SFP. The findings in Table 4.2 illustrate that 54.5% (112) respondents agreed that the project charter has been developed. 40.9% (48) of the respondents are not sure whether a project charter has been developed or not 4.5% (13) strongly agreed that a project charter has been developed. The mean score of the responses is 3.64 which imply project charter is applicable on Forever Family Project. Findings from the qualitative research assured that there existed a project charter at the beginning of the project that was received from an authorized government office. In addition, the institute has to sign a new project agreement with Children and Women Affairs after submitting a 3-year project proposal that consists of the project objectives, action plan and scope every 3 years. This is because unlike other projects, the Forever Family project has no limited time frame. About the development of an integrated project management plan (42) respondents were not certain about the development of PM-plan while 54.5% (111) respondents agreed and 14(9.1%) strongly agreed that there is project management plan with a mean value 3.68.The finding shows that there is a good practice of integrated project management planning in SFP. Based on the qualitative assessment, the institution follows a bottom up planning approach which means plans are developed at the lower levels of each department and funneled up through consecutive levels until it reaches the top level and gets piled up after general discussion.

On the third question, the respondents were asked about the integration and coordination between project departments (9.1%) 4 respondents strongly agreed and 112 (54.5%) agreed that there is an integration between department while 38 (18.2%) respondents stayed neutral On the contrary, 38 people (18.2%) disagreed that there is an integration between departments with mean results of 3.55 which implies there is an effective integration and coordination between project departments.

The respondents were asked if there is a habit of reviewing the project progress based on the plan. 9.1% (4) respondents strongly agreed, 54.5% (112) respondents agreed, 27.3% (42) remained neutral, and the rest 9.1% (2) respondents disagreed with a mean result of 3.64. This implies the practice of progress review in SFP is acceptable. From the qualitative assessment, it is noted that based on the annual action plan activities are evaluated at the department and individual level quarterly, biannually, and annually then discussed with the team. Additionally, to evaluate the overall project progress the management identifies wildly important goals (WIG) of the year that are followed up and evaluated annually.

The respondents were asked to indicate their level of agreement if there is a practice project progress reporting based on the plan. 13.6% (22) respondents strongly agreed, 36.4 % (38) agreed, and the remaining 45.5 (110) respondents were uncertain that project progress has been reported upon the plan. The mean and standard deviation results were 3.59which indicates project progress reporting was applicable in SFP. Results from the qualitative study show project progress is discussed with team members but not reported on hard copy necessarily if not requested from stakeholders. The study findings of this section indicate the overall integration management of SFP is practiced at a satisfactory level with a cumulative mean value of 3.61 and SD 0.58.

The low cumulative SD result implies there is a lot of agreement between respondents about the answers. According to PM4DEV, application of integration management brings capable people in planning and implementing a series of related activities that need to be accomplished on a specific date with a limited budget. Ensuring proper coordination between departments and the nine project knowledge practices is one of the most critical roles of a project manager that leads to project success (PM4ngo, 2020).

4.2.2. Project integration management cumulative mean

Descriptive Statistics

	N	Mean	Std. Deviation
Project integration	204	3.6182	.58849
Valid N(list wise)	204		

Source: own survey (2025)

4.2.3. Green Projects cope management

Project scope specifies what is and is not included in the project and regulates what is added or removed as the project progresses (Tesfatsion, 2019).To find out the practice of project scope management the respondents were asked to give assessment values of their organizational trend. The results are provided on the table below.

Table4.4.Projects cope management

Scope management plan was defined As a basis for future project decisions	frequency	Percent	Valid Percent	Cumulative Percent	mean
Strongly agree	40	4.5	4.8	4.8	
Agree	-	-	-	-	
Neutral	80	45.5	47.6	52.4	
Disagree	80	45.5	47.6	100.0	**2.45**
Strongly disagree	-	-	-	-	
Total	200	95.5	100.0		
Missing	4	4.5			
Total	204	100.0			
Requirements were clearly defined from	Frequency	Percent	Valid Percent	Cumulative Percent	
The beginning					
Strongly agree	13	4.5	4.8	4.8	
Agree	13	4.5	4.8	47.6	
Neutral	65	36.4	38.1	42.9	
Disagree	110	50.0	52.4	100.0	
Strongly disagree	-	-	-	-	**2.45**
Total	201	95.5	100.0		
Missing	3	4.5			
Total	204	100.0			
Changes to the Green Project scope were controlled	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly agree	31	4.5	5.0	5.0	
Agree					
Neutral	79	40.9	45.0	50.0	
Disagree	90	45.5	50.0	100.0	
Strongly disagree	-	-	-	-	
Total	200	90.9	100.0		**2.45**

Missing	4	9.1			
Total	204	100.0			

Source: own survey (2025)

Based on Table 4.4 on the question that assesses if the scope management plan was defined with one response missing out of 200 respondents 4.5% (31) respondent strongly agreed,45.5% (90) respondents indicated they agree and, 45.5% (90)were not certain if a scope plan has been developed. The mean value resulted in 2.45 which are low. This implies the scope management plan is poorly defined.

The second assessment in this section was if scope requirements were clearly defined from the beginning with one response missing out of 21 respondents 4.5% (31) respondent strongly agreed, 58(36.4%) of respondents were not sure, were as (110)50% of the respondents disagreed and 90 respondent agreed about the raised issue. The other question that was put forward to the respondents were, if the changes to the Green project scope were controlled, with 4 respondents Missing from 200 respondents 90 or (45.5 %) disagreed, 79 or 40.9 % were not certain and 90 respondent strongly agreed. The mean result of the responses is 2.45. The result still indicates control of scope changes is practiced at low level. As it can be seen on Table 4.5 the cumulative mean value of the scope management is 2.45and SD value is 0.51which indicates scope management practice is poorly applied in SFP and there is a lot of agreement between respondents about the answers.

Table: 4.5.Green Project scope cumulative mean

Descriptive Statistics

	N	Mean	Std. Deviation
Project scope	204	2.4545	.51993
Valid N(list wise)	204		

Source: own survey (2025)

As it has been identified from the qualitative assessment also, there is no work breakdown structure created and no written scope management plan so far. In terms of the scope of services, the management lists down the services included in the project but not the non-included ones. Sometimes the project's nature by itself doesn't allow the management to list down all the non- included services but the concerned staff members know the scope of services that came along with the organizational process assets. Considering children's entrance criteria to the family homes as one component of scope, the institution set different including and excluding criteria of entrance

like age ranges between 2 and 8, being a double orphan, and orphans with siblings having a higher chance of being accepted in SFP.

Whereas some intellectual and physical disabilities that restrict the child from being educated might be an exclusive criterion because the project might not provide quality services as required. But, as the project nature deals with people, facing scope creep is common in Selamta. For example, some children might need services beyond the scope or different social situations force the institution to accept children beyond the age range, children with disabilities, and other similar scenarios. Though the project has faced different challenges like difficulty of suiting orphans who are beyond the age range in the family homes psychosocially and difficulty of self-empowering the orphans whose education level and age is inconsistent, going beyond the limit to give services for children with special needs and the like.

Momina (2025) says "if you do not have a comprehensive project scope management plan in place, there is a significant chance that your team might waste time or perform work that is not necessary to complete the project at hand". A poorly managed scope can substantially impede the progress of the project. Project managers would be unable to accurately estimate the amount of time, money, and human resources required for a project. WBS is one of the fundamental tools used in scope management that provides the project manager and the team with the opportunity to break down a high-level scope statement into smaller, manageable units of work, called work packages (Golini ,2014). According to online polls, 80% of projects waste at least half of their time reviewing projects which might not be necessary. Creating a Work Breakdown Structure based on the project scope statement and the documents gathered during requirements collection effectively breaks down the whole project into smaller individual tasks. Because of the clearly specified deliverables, the project manager and team would have multiple more manageable pieces of work.

4.2.4. Project time management

This process includes the actions required to ensure the timely completion of the project. It is the development of a project schedule that contains all project activities (PM4ngo, 2020). Practice of the time management system of SFP was measured by asking the respondents to feedback their level of agreement about the practice of time management processes in SFP.

Table: 4.6; Project time management processes

Time/schedule management plan is developed	Frequency	Percent	Valid Percent	Cumulative Percent	mean
Strongly disagree	-	-	-	-	
Disagree	23	9.1	9.1	9.1	
Neutral	33	13.6	13.6	22.7	
Agree	125	68.2	68.2	90.9	**3.77**
Strongly agree	23	9.1	9.1	100.0	
Total	204	100.0	100.0		
Activities are defined per time	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	-	-	-	-	
disagree	42	9.1	9.1	9.1	
neutral	25	13.6	13.6	22.7	
agree	95	68.2	68.2	90.9	**3.77**
Strongly agree	42	9.1	9.1	100.0	
Total	204	100.0	100.0		
Activities are sequenced	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	-	-	-	-	
Disagree	31	9.1	9.1	9.1	
Neutral	-	-	-	-	
Agree	146	86.4		95.5	
Strongly agree	27	4.5	4.5	100.0	
Total	204	100.0	100.0		
Duration of Activities are estimated	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	-	-	-	-	
Disagree	8	9.1	9.1	9.1	
Neutral	33	13.6	13.6	22.7	

Agree	155	68.2	68.2	90.9	
Strongly agree	8	9.1	9.1	100.0	
Total	204	100.0	100.0		**3.77**
A change to the project schedule is controlled	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	-	-	-	-	
Disagree	-	-	-	-	
Neutral	71	36.4	36.4	36.4	
Agree	123	59.1	59.1	95.5	
Strongly agree	11	4.5	4.5	100.0	
Total	204	100.0	100.0		

Source: own survey (2025)

According to the table provided above, the first assessment in the time management section was if a time management plan is developed. 31(4.5%) respondent strongly agreed, 4 respondents were not certain, 11 (4.5%) respondent disagreed, and majority 81.8% (58) respondents agreed upon the development of a time management plan. The mean value is 3.86which implies a time management plan is practiced in SFP at a good level.

By the same manner, for the question that asks if activities are defined per time 2(9.1%) respondents strongly agreed, 3 (13.6%) respondents were not certain,2(9.1%) respondents disagreed and majority68.2.7% (15) agreed that activities are defined per time. The value of the mean 3.77, which implies definition of activities per time is well defined in SFP.

Similarly, the majority or 86.4% (146) of the respondents have agreed that activities are sequenced, 11(4.5%) person strongly agreed and 8(9.1%) people disagreed with mean value of 3.86 which implies that majority of respondents agreed that activities are sequenced. For the question that asks if the duration of activities is estimated,3 (13.6%) respondents were neutral, 85 (62.8%) agreed and 2 (9.1%) respondents disagreed and the rest 2 (9.1%)of respondents strongly agreed. From the high mean result which is 3.77. It can be concluded that estimation of duration of activities is largely applicable in SFP.

The response of respondents for the question that asks if changes to project schedule is controlled, 123 (59.1%) of respondents agreed that changes to the project schedule is controlled and 71 (36.4%) were notcertain,11(4.5%) respondent strongly agreed with results of mean value 3.68. This implies changes to the project schedule are controlled in SFP. In general the cumulative mean of practice of time management in SFP is 3.79 and SD 0.46 respectively which indicates time management practice in SFP is practiced at full scale and there is a lot of agreement between respondents about the answers.

This result is also supported by the qualitative assessment that the project uses a sales force program management module to compile and sequence all departments' activities and track and measures their outcomes as well. The module helps to track what programs are currently active, what services are provided as part of those programs, and who is receiving those services. This empowers all staff to see impact to better plan their work and share it with donors and foreign staff members. Currently about 77 services categorized in 11 programs are registered with framed time and sequence. The software helps to track if each child obtains the needed services at the right time. Performance measurement and appraisal of each department is also done based on the information gained from this platform. The software also helps to put results in graphic terms for easy evaluation and reporting. Table 4.7 project time management cumulative mean

Descriptive Statistics

	N	Mean	Std. Deviation
Project time	204	3.7909	.46384
Valid N (list wise)	204		

Source: own survey (2025)

4.2.5. Project cost management

The study sought to assess the practice of project cost management and forwarded questions if the processes of project management are applicable under SFP.

Table 4.8; Project cost management processes

Budget plan is well defined	Frequency	Percent	Valid Percent	Cumulative Percent	mean
Strongly disagree	7	4.5	4.5	4.5	
Disagree	16	9.1	9.1	13.6	

Neutral	7	4.5	4.5	18.2	
Agree	145	68.2	68.2	86.4	**3.77**
Strongly agree	29	13.6	13.6	100.0	
Total	204	100.0	100.0		
Proper budget estimate on Has been made	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	-	-	-	-	
Disagree	23	13.6	13.6	13.6	
Neutral	23	13.6	13.6	27.3	
Agree	144	63.6	63.6	90.9	**3.68**
Strongly agree	14	9.1	9.1	100.0	
Total	204	100.0	100.0		
The required budget is determined	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly Disagree	-	-	-	-	
Disagree	26	13.6	13.6	13.6	
Neutral	7	4.5	4.5	18.2	
Agree	145	68.2	68.2	86.4	**3.82**
Strongly agree	26	13.6	13.6	100.0	
Total	204	100.0	100.0		
A change to the project budget is controlled	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	-	-	-	-	
Disagree	34	13.6	13.6	13.6	
Neutral	36	27.3	27.3	40.9	**3.55**
Agree	111	50.0	50.0	90.9	
Strongly agree	23	9.1	9.1	100.0	
Total	204	100.0	100.0		
Clear project cost management policies, procedures, documentation	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly agree	-	-	-	-	

Disagree	2	9.1	9.1	9.1	
Neutral	47	31.8	31.8	40.9	
Agree	123	59.1	59.1	100.0	
Total	204	100.0	100.0		**3.50**

Source: own survey (2025)

As the results of Table 4.8 show, on the question that asks if the budget plan is well defined, 34(13.6%) respondents strongly agreed,47 respondent was neutral, 145(68.2%) agreed, 2(9.1%) respondents disagreed and 7(4.5%) strongly disagreed that the budget plan is defined with a mean value 3.77 which implies budget plan is well defined in SFP.

Likewise, respondents that strongly agreed proper that budget estimation has been made are 2 respondents (9.1%), 34(13.6%) respondents were uncertain, 144(63.6%) agreed and the rest 34(13.6%) respondents disagreed with a mean value 3.82. This result shows proper budget estimation has been made in SFP. Again the respondents were asked if the required budget is determined, 34 (13.6%) respondents strongly agreed, 7 (4.5%) stayed neutral,34(13.6%)respondents disagreed and the majority of the respondents 68.2% (145) agreed with a mean 3.82 which implies the required budget was determined at a satisfying level so far. The respondents‟ feedback on if a change to the project budget is controlled 2 respondents (9.1%) strongly agreed, 6 respondents were neutral and 11(50%) respondents agreed and 33 (13.6%) respondents disagreed. The mean is 3.55which indicates changes to the budget are controlled. As a last question of this section, the respondents were asked if cost management policies and procedures are applied in SFP out of 204 respondents 144(59.1%) respondents have agreed, 47(31.8%) were neutral and 23 (9.1%) respondents disagreed with a mean value resultof3.5which implies cost management policies were applied at adequate level in SFP. The overall mean result of the practice of cost management in SFP is 3.66and SD0.76, which can be interpreted as cost management practice in SFP has been practiced at a satisfying level with average agreement between respondents about the answers. This result is supported by the interview that was held with the finance manager that each department takes the responsibility of estimating their own budget based on previous similar transactions and the current market then the estimated budget gets discussed with the project management team and the department heads before being determined with 10% markup. This system decreases the probability of improper budget estimation and determination as well. But still, significant variances might occur because of the country's economic inflation especially on the costs of house rentals and unexpected health concerned budgets. When such problems occur, budget amendment is done accordingly. Regarding cost management policies, SFP follows all government policies and procedures on its financial system and reports annually. The project is using the Generally Accepted Accounting Principles (GAAP) system for financial

accounting in the meantime but since it is imposed by the Bureau of Finance (BOF) the financial department is being prepared to change the system to International Public Sector Accounting Standards (IPSAS) that are designed for public sector entities whose main objectives are to provide goods and services that benefits the society. Table 4.9; Project cost cumulative mean

Descriptive Statistics

	N	Mean	Std. Deviation
Project cost	204	3.6636	.76441
Valid N (list wise)	204		

Source: own survey (2025)

Table4.12.Project procurement management processes

Resources needed for the project are determined	Frequency	Percent	Valid Percent	Cumulative Percent	mean
Strongly disagree	-	-	-	-	
Disagree	8	4.5	4.5	4.5	
Neutral	16	9.1	9.1	13.6	**3.86**
Agree	172	81.8	81.8	95.5	
Strongly agree	8	4.5	4.5	100.0	
Total	204	100.0	100.0		
Requirements of the Project materials are documented	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	-	-	-	-	
Disagree	-	-	-	-	
Neutral	34	18.2	18.2	18.2	
Agree	167	77.3	77.3	95.5	
Strongly agree	3	4.5	4.5	100.0	**3.86**
Total	204	100.0	100.0		
Potential sources are identified	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	13	4.5	4.5	4.5	
Disagree	47	31.8	31.8	36.4	

Neutral	111	50.0	50.0	86.4	
Agree	33	13.6	13.6	100.0	**2.73**
Strongly agree	-	-	-	-	
Total	204	100.0	100.0		
Contracts are completed and settled properly	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	6	4.5	4.5	4.5	
Disagree	48	27.3	27.3	31.8	
Neutral	122	54.5	54.5	86.4	
Agree	28	13.6	13.6	100.0	**2.77**
Strongly Agree	-	-	-	-	
Total	204	100.0	100.0		

Source: own survey (2025)

Based on the table displayed above from the total 204 respondents, 172 (81.8%) of them agreed, 23(9.1%) were neutral, 90 respondent strongly agreed and another 6(4.5%) respondent disagreed that resources needed for the project are determined with a mean result 3.86 which means project resources were determined in good level.

For the question that evaluates if project materials are documented 172 (77.3%) of respondents agreed, 34(18.2%) were uncertain and 4(4.5%) person strongly agreed with a mean result of **3.86** which implies project material documentation is applied in good level in SFP. On the other hand, the respondents were asked if potential sources are identified. From the total of 204 respondents, 6 (4.5%) strongly agreed, 23(13.6%) agreed, 111(50%) were neutral and 47 (31.8%) disagreed about the identification of potential sources with a mean result of **2.73** which implies the identification of potential resources were applied at a moderate level that most of the respondents were not sure if it were practical or not. Similarly, 6(4.5%) strongly agreed 33(13.6%) respondents strongly agreed, another 26(27.3%) respondents disagreed and the rest 112 (54.5%) respondents were uncertain if contracts were completed and settled properly. The mean value resulted in **2.77** which imply contract settlements were applied at a moderate level. The cumulative mean and SD result of this section is 3.30 and 0.29 respectively which implies procurement management is practiced in SFP on an average level and the low SD result shows there is a lot agreement between respondents about their answers.

In the interview conducted with the project purchaser, it's explained that daily living materials including groceries are purchased by each home caregiver like every family. But when there is a need of furnishing a new or existing orphan home, stationary materials for the students and the staff, or similar situations, there is a purchasing committee that has 3 members. The committee has a mandate of deciding and documenting the quality and specification of the materials needed. So whenever the purchasing cost exceeds 10,000 birr the purchaser collects a "pro for main voice" so that the committee can compare and contrast the price and quality before purchase. But if the total price is more than 100,000 the committee goes for a BID. As the purchaser confirms there is no known potential source or permanent contracts so far, the materials are collected from any source if it fulfills the formality with a better price. According to watts (2018), despite its importance, procurement in humanitarian operations remains underestimated. A procurement plan is an important tool for efficient procurements throughout the project. It should be developed based on the project's WBS and schedule to include all procurements and to be timely integrated into the project. Keith (2018) highlighted the drawbacks of traditional methods of procuring goods in projects in particular procuring goods of lower price and the fallacy of awarding contracts solely on the basis of the lowest price bid and incomplete settlement of BID. Despite its importance, procurement in humanitarian operations remains underestimated.

Table4.13 project procurement cumulative mean and SD

Descriptive Statistics

	N	Mean	Std. Deviation
Project procurement	204	3.3068	.29813
Valid N(list wise)	204		

Source: own survey (2025)

4.3. Project risk management

Risk Management includes all the processes concerned with identifying, analyzing, and responding to project risk. The purpose of a risk analysis is to gain control of the uncertainties in the project. When risks are identified, it is important that a strategy is developed in order to respond to the risk (PM4ngo, 2020). While assessing the practice of risk management in SFP, respondents were asked questions regarding the processes of project risk management which the results are shown on the table below. Table 4.18.Project risk management processes

Risk management plan is developed	Frequency	Percent	Valid Percent	Cumulative Percent	Mean
Strongly disagree	-	-	-	-	
Disagree	124	54.5	54.5	54.5	
Neutral	69	40.9	40.9	95.5	2.55
agree	-	-	-	-	
Strongly agree	11	4.5	4.5	100.0	
Total	204	100.0	100.0		
Risks are identified And registered	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	4	4.5	4.5	4.5	
Disagree	111	50.0	50.0	54.5	2.41
Neutral	89	45.5	45.5	100.0	
Agree	-	-	-	-	
Strongly agree	-	-	-	-	
Total	204	100.0	100.0		
Risks are prioritized	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	21	4.5	4.5	4.5	
Disagree	86	45.5	45.5	50.0	2.45
Neutral	97	50.0	50.0	100.0	
Agree	-	-	-	-	
Strongly agree	-	-	-	-	
Total	204	100.0	100.0		
Implications of risks On the project are estimated	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	22	4.5	4.5	4.5	
Disagree	136	54.5	54.5	59.1	
Neutral	38	36.4	36.4	95.5	2.41
Agree	8	4.5	4.5	100.0	
Strongly agree	-	-	-	-	

Total	204	100.0	100.0		
The identified risks Were monitored and controlled	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	8	4.5	4.5	4.5	
disagree	99	50.0	50.0	54.5	
Neutral	89	40.9	40.9	95.5	
Agree	8	4.5	4.5	100.0	2.45
Strongly agree	-	-	-	-	
Total	204	100.0	100.0		
Risk response plan is developed	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	18	4.5	4.5	4.5	
Disagree	100	50.0	50.0	54.5	2.41
Neutral	86	45.5	45.5	100.0	
Agree	-	-	-	-	
Strongly agree	-	-	-	-	
Total	204	100.0	100.0		

Source: own survey (2025)

The respondents were asked if the risk management plan is developed and from a total of 204 respondents 126 (54.5%) respondents disagreed, 136 were uncertain and 18(4.5%) of respondents strongly agreed with a mean of 2.55 which shows a low level of risk management planning in SFP. For the question that assesses if risks were identified 50 % (11) of the respondents disagreed 10(45.5%) were uncertain and the rest 1 (4.5%0 respondent strongly disagreed. The mean result of this specific question is 2.41 which indicate a low level of practice. The respondents were asked if the risks are prioritized.10 (45.5 %) of respondents disagreed, 11 (50%) were neutral and 1(4.5%) person strongly disagreed with mean and results 2.45 respectively which similarly indicates low level of practice.

In the same manner, from the total of 204 respondents 128 (54.5%) disagreed that risk implications on a project is estimated, 38(36.4%) were uncertain and 18(4.5%) respondent strongly agreed and another 18(4.5%) respondent disagreed with a mean result of 2.41which implies a low level of practice. Similarly, 50% (100) respondents disagreed that the identified risks were monitored and controlled, 89(40.9) were unsure and

18(4.5%) respondent strongly agreed and another 18(4.5%) respondent disagreed with a mean result of 2.45 which implies a low level of practice.

As a final assessment of this section out of 204 respondents, 50% (120)of respondents disagreed risk response plan is developed,45.5% (110) were uncertain and 1(4.5) strongly agreed with a mean result of 2.41The cumulative mean result of this section is 2.44which implies risk management in SFP has a low level practice and the low SD result which 0.48 shows there is a lot of agreement among respondents about the given answers. Upon the interview, the country director said "Though there were risks we anticipated informally from the country's economic situation and the global issues, honestly speaking, we haven't done anything formal like proper risk identification, prioritization, and mitigation plan so far. But nowadays because some of the risks we anticipated like house rental rise-ups and scarcity of foreign funds are showing up, we find it very useful to take our time and work on our risk management processes". According to PMI (2013), risk is an uncertain event or condition that, if it occurs, has a positive or negative effect on the project's objectives. Project risks usually refer to a project's scope, budget, time, resources, technology, or any unpredicted situations that no body's insured against. What is also worth one's attention is that risk is associated with a certain degree of uncertainty, but its outcomes can be predicted and taken in to account in case this anticipated situation occurs. What cannot be avoided should be managed in order to reduce the negative impact of unfavorable events. If the project has a well-defined project management plan it is less likely to get out of control, It is easy to identify the project's strong and weak points as well as potential opportunities and threats above all knowing how to respond to possible risks reduces uncertainty and provides all the project participants with more confidence (peter, 2025). But most project managers do not consider it as something important and worth time and effort. This is because either they are too optimistic about the process of project implementation or a matter of being negligent. But having a risk management plan in place allows one to be proactive and take steps to mitigate possible harms before they arise, instead of constantly fighting (Tara Duggan, 2019).

Table 4.19. Project risk cumulative mean and SD

	N	Mean	Std. Deviation
Project risk	204	2.4470	.48628
Valid N (list wise)	204		

Source: own survey (2025)

4.3.1. Projects take holder management

Failing to manage stakeholders can lead to difficult situations, especially when the project has to deal with a key stakeholder who has the power to disrupt the project. Insufficient involvement and infrequent communication with stakeholders is a leading cause of project failure in development projects (PM4ngo, 2020).The study sought

to assess practice of stake holder management in SFP and respondents were requested to value their agreeableness on the processes of project stakeholder management .The results are shown on the tables below. Table 4.20.Projects take holder management processes

Project stakeholders are identified	Frequency	Percent	Valid Percent	Cumulative Percent	mean
Strongly disagree	-	-	-	-	
Disagree	-	-	-	-	
Neutral	4	18.2	18.2	18.2	
Agree	16	72.7	72.7	90.9	
Strongly agree	2	9.1	9.1	100.0	3.91
Total	22	100.0	100.0		
Stakeholder management plan is defined	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	-	-	-	-	
Disagree	2	9.1	9.1	9.1	
Neutral	8	36.4	36.4	45.5	3.
Agree	12	54.5	54.5	100.0	45
Strongly agree	-	-	-		
Total	22	100.0	100.0		
There is effective communication among project stakeholders	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly agree	1	4.5	4.5	4.5	
agree	-	-	-	-	
Neutral	6	27.3	27.3	31.8	
Disagree	1	4.5	4.5	36.4	3.
Agree	14	63.6	63.6	100.0	68
Total	22	100.0	100.0		
There is adequate involvement of stakeholders in project processes	Frequency	Percent	Val id Perc	Cumulative Percent	

			ent		
Strongly agree	1	4.5	4.8	4.8	
Agree	-	-	-	-	
Neutral	4	18.2	19.0	23.8	
Disagree	2	9.1	9.5	33.3	3.64
Agree	14	63.6	66.7	100.0	
Total	21	95.5	100.0		
Missing	1	4.5			
Total	22	100.0			
Stakeholder's engagement is controlled	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	-	-	-	-	
Disagree	2	9.1	9.1	9.1	
Neutral	6	27.3	27.3	36.4	
Agree	14	63.6	63.6	100.0	3.55
Total	22	100.0	100.0		
Project progress is reviewed frequently	Frequency	Percent	Valid Percent	Cumulative Percent	
Strongly disagree	-	-	-	-	
Disagree	2	9.1	9.1	9.1	
Neutral	5	22.7	22.7	31.8	
Agree	13	59.1	59.1	90.9	3.68
Strongly agree	2	9.1	9.1	100.0	
Total	22	100.0	100.0		

Source: own survey (2025)

On the question that asked if project stakeholders were identified, 16 (72.7%) of the respondents agreed, 2(9.1%) respondents strongly agreed, 4(18.2%) respondents were neutral with a mean result of 3.91and0.526.The respondents were asked if the stakeholder management plan was defined 54.5% (12) agreed, 36.4% (8) were neutral, and 2(9.1%) respondents disagreed with a mean result of 3.45 respectively.

The respondents wereasked if there is effective communicationamongproject stakeholders. Out of 22 respondents 14(63.6%) respondents agreed,(27.3%) 6 were uncertain,1 (4.5%) respondent stronglyagreedand1respondentdisagreed.Themeanvalueofthisspecificsection is3.68which implies there is high level of effective communication between stakeholders. The respondents were asked if there is adequate involvement of stakeholders in the project process. With one response missing, out of 21 respondents 14(63.3%) agreed, 2(9.1%) respondents disagreed ,4(18.2%) were neutral and 1(4.5%)strongly agreed. The mean result of 3.64. Out of22 respondents 14(63.6%) agreed, 2 (9.1%) disagreed and 6(27.3%) were not sure whether Stakeholderengagementis controlledor not, as afinalassessment ofthis sectiontherespondents were asked if project progress is reviewed frequently 2(9.1%) respondents disagreed and 5 were uncertain,13 (59.1%) agreed and (2) 9.1%respondents stronglyagreed there is a frequent project progress review in SFP with a mean result 3.68. The overall mean value of this section is **3.65** and SD **0.49** which implies stakeholder management is practiced in SFP at full scale and the low SD result shows there is a lot of agreement among respondents about their answers.

In the interview conducted with the country director and the project manager, they mentioned 3 main stakeholders:- the primary ones are the donors and staff members found in the USA, the second ones are partner organizations that does similar work like SFP and governmental organizations like BOFED (Biro of finance and economic development), CSA (charity and civil societyoffice) and women and children affairs at district and citylevel and the third ones are the beneficiaries found in the family homes or get supported on outreach program. Even the community at large can be considered as stakeholder because there are people from the community that directly and indirectly get services from SFP. Basically, there is a strong relationship with foreign potential donors. They participate in the planning processes by reviewing and commenting on the annual plan proposal made bythe office and following up the day-to-day technical activities through theSalesforcedatabasesoftwarewhich is a cloud-based

platform that allows shared view. There is also an internal information system called "Try Eye" that a selected person writes an email every Friday for any new social events and makes Zoom calls to introduce newly joined staff members or socialize with the family groups. Beyond that, they are appreciated to come and visit what is on the ground so they come and stay in the neighborhood for days, weeks, and even months. On the other hand, the BOFED, which is concerned about the financial transactions, monitors financial reports annually as women and children affairs and the CSA does the monitoring and control of their activity quarterly and annually. Annual activity and budget reports are reported to these partner organizations. On the other hand, SFP psychosocial department works hard through its social workers, the caregivers, and the general staff member to build up a family-like relationship with the beneficiaries in the familyhomes. So, trackingtheir dailyactivities, psychosocial status, and needseither formallyor informally is not such a difficult task.

Table4.21.Stakeholdermanagementcumulativemeanand SD

DescriptiveStatistics	N	Mean	Std.Deviation
Projectstakeholder	22	3.6515	.49843
ValidN(listwise)	22		

Source:ownsurvey(2023)

GeneralprojectmanagementchallengesfacedinSFP

Another section ofassessment forthisstudywasto investigate commonchallengesregardingthe management system .The table below shows the results of the data .

Table4.22.Generalprojectmanagement challenges

project management methodologies has been practicedenoughinSelamta family project	Frequency	Percent	Valid Percent	Cumulative Percent	Mean	SD
Stronglydisagree	-	-	-	-		
Disagree	5	22.7	22.7	22.7		
Neutral	9	40.9	40.9	63.6		
Agree	7	31.8	31.8	95.5	**3.18**	**.853**
Stronglyagree	1	4.5	4.5	100.0		
Total	22	100.0	100.0			
Thereisinsufficienttechnical skill within the team	Frequency	Percent	Valid Percent	Cumulative Percent		
Stronglydisagree	-	--	-	-		
Disagree	3	13.6	13.6	13.6		
Neutral	4	18.2	18.2	31.8		
Agree	14	63.6	63.6	95.5	**3.59**	**.796**
Stronglyagree	1	4.5	4.5	100.0		
Total	22	100.0	100.0			
There is insufficient project managementknowledgewithin theteam	Frequency	Percent	Valid Percent	Cumulative Percent		
Stronglydisagree	-	-	-	-		
Disagree	7	31.8	31.8	31.8		
Neutral	3	13.6	13.6	45.5	**3.23**	**.922**
Agree	12	54.5	54.5	100.0		
Stronglyagree	-	-	-	-		
Total	22	100.0	100.0			
Themanagementteamgiveless attentiontothe practices of projectmanagement methodologies	Frequency	Percent	Valid Percent	Cumulative Percent		
Stronglydisagree	1	4.5	4.5	4.5		
Disagree	3	13.6	13.6	18.2		
Neutral	6	27.3	27.3	45.5	**3.32**	**.894**
Agree	12	54.5	54.5	100.0		
Stronglyagree	-	-	-	-		
Total	22	100.0	100.0			
Managementpersonalinterests affect the project management practice	Frequency	Percent	Valid Percent	Cumulative Percent		
Stronglydisagree	-	-	-	-		
Disagree	11	50.0	50.0	50.0		
Neutral	5	22.7	22.7	72.7		
Agree	5	22.7	22.7	95.5	**2.82**	**.958**
Stronglyagree	1	4.5	4.5	100.0		
Total	22	100.0	100.0			

Source:ownsurvey(2023)

The first assessment question forwarded was if project management methodologies have been practiced enough in SFP. From the total of 22 respondents, 5 (22.7%) disagreed, 9 (40.9%) were

neutral, 7 (31.8%) agreed and 1 respondent strongly agreed that project management methodologies have been practiced in SFP with a mean value of 3.18 and SD result 0.85 which

within indicates that project management methodologies have an average level of practice in SFP. The SD result shows there is an average level of agreement between respondents about the given repsonse.

The second question assessed the respondents‟ agreement if there is insufficient technical knowledgewithintheteam3(13.6%)disagreed,4(18.2%)wereneutral,14(63.6%)agreedandthe rest 1 respondent stronglyagreed there is insufficient knowledge within the team. The mean and SD result of this specific question is 3.59which implies there is no enough technical knowledge about the project management practices and respondents haveaverage level of agreement about the given response. This result can be related with lack of project management trainings and scarcity of project management background in the team which has been explained on the previous sections .

Similarly, the respondentswere askedif there isinsufficient skill in project management practice the team. Out of 22 respondents, 7(31.8%) of respondents disagreed,3(13.6%) were uncertainand12(54.5%)agreedthere inprojectmanagementinsufficientskillwithinthe teamwitha mean and SD value of 3.23and0.922which implies the team skill towards technical project management is at an average level. The respondents also have average level of agreement about the given response.

The 4th question forwarded was if the management team gives less attention to the practices of projectmanagementmethodologies.1(4.5%)respondentstronglyagreed,3(13.6)disagreedand

27.3 (6) were neutral and 12(54.5%) agreed the management gives less attention to the project management methodologies with a mean result of 3.32and.894which implies the management gives an average level of attention to the project management methodologies and respondents haveaverage level of agreement about the their answer.

The last assessment of this section was if management's personal interest affects the project management practice. Of the 22 respondents, half of them disagreed(11 counts, 50%),5 (22.7%) were neutral and another 5(22.7%) respondents agreed and the remaining 1(4.5%) respondent strongly agreed with a mean result of2.82andSD0.95which indicates management personal interest doesn‟t affect the project management practice. The SD result indicates the respondents average level of agreement about the given response.

Generalinternalandexternal challenges

As a final assessment, the respondents were asked to choose the common internal and externalchallengesthatmostlyoccurinSFP.Thefrequencytablebelowshowsthesurvey results.

Table 4.23Internalchallenges

Internalchallenges		Frequency	Percent	ValidPercent	CumulativePercent
	Poorgoaland objectivesetting	1	4.5	4.5	4.5
	Poorstakeholder management	2	9.1	9.1	13.6
	Lackofclarityinthescopeof theproject	3	13.6	13.6	27.3
	Budget(resource)restrictions	10	45.5	45.5	72.7
	Poortimemanagement	4	18.2	18.2	90.9
	Unclearpoliciesandprocedures	2	9.1	9.1	100.0
	other	0	0	0	
	Total	22	100.0	100.0	

Source:ownsurvey(2023)

Table 4.2.4Externalchallenges

Externalchallenges	Frequency	Percent	ValidPercent	CumulativePercent
Governmentpolicy	5	22.7	22.7	22.7
Environment	3	13.6	13.6	36.4
Economicinflation	13	59.1	59.1	95.5
other	1	4.5	4.5	100.0
Total	22	100.0	100.0	

Source:ownsurvey(2023)

As Table 4.24 shows 45.5 % of respondents choose budget or resource restriction as a top challenge that SFP is facing from internal challenges. Poor time management, lack of clarity on the scope, and unclear policies and procedures are other challenges that the project is facing in terms of internal challenges. This result might be related with the previous findings of the study such as poor scope management and poor risk management systems.

On the other hand, 13(59.1%) of respondents choose economic inflation as a top external challenge that the project is facing. Government policies and challenges from the environment are the next external challenges that the project is facing. One basic challenge that SFP is facing

now is a financial burden. This happened because most NGOs that give similar services to Selamta are sponsor based, which means one donor specifically helps a child or children or family so they can witness their physical, economic, and psychosocial changes. This system might make the donors more interested to fund but unsuitable for the operational system.

So SFP has changed the system to program support based that every donor donates to the program and the money enters into one box and is distributed equally as needed. This transition makesitdifficulttofinddonorswhichresultedinfinancialscarcity.Themanagementisstudying ways of establishing profitable wings like lands and real states to be financially independent. Likewise, another challenge fromgovernment organizationsistheythink theannual expenseand the number of children raised is not equivalent. It is because theydon‟t consider the number and thequalityofservicesweare givingtothe children.Themanagementalways triestoexplainthat to the concerned officials.

CHAPTERFIVE

CHAPTERFIVE

5. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter finalizes the study by providing the summary of key findings, conclusions and recommendations that can help to improve the practice of project management in SFP.

5.1. Summary of major findings

- Majority of the project management knowledge areas like project integration, time, cost, quality and stakeholder management areas are practiced at high level. With higher mean results of 3.61, 3.79, 3.66, 3.61, 3.65 respectively and impressive qualitative results.
- Specially improved practices of stakeholder handling, giving much attention to quality of services and using Sales Force software application which has a cloud based platform and program management module has simplified the documentation and the overall management practices.
- On the other hand, there is no separate project management department in SFP.
- Project management training was given only a few times for the management staff and focused on project success rather than the technical parts.
- Scope management practices like collecting requirements from stakeholders, developing scope management plan, controlling changes in scope where practiced at lower level with overall mean result 2.45 and supportive qualitative results.
- Procurement management practices were applied on average level. Especially identifying potential suppliers with a mean result 2.73 and settling contracts with a mean result 2.77falls into average level of practice. The overall mean result is also 3.30 which falls also to the average level of practice.
- Though the cumulative mean result of communication management is 3.74, which implies it is practiced at good scale, lots of uncertainty or preferring to stay neutral while asked about the daily management practices and from the qualitative assessment it is noted that communication management is not practiced at satisfying scale.
- Though the quantitative results hit above average level with a mean result 3.65, failing to follow the human resource management procedures from recruitment to some HR processes were identified from the qualitative assessment.

- With a mean result 2.44 and supportive qualitative results risk management processes were not practiced beyond thoughts.
- Among the major challenges regarding PM practices, low project management technical knowledge with a meanresult3.23 and average skill on project management methodologies was seen with a mean result 3.59.
- The respondents also agreed that the management gave not much attention on the technical practices of PM knowledge areas with average mean result 3.32.
- 45.5 % of respondents agreed the main internal general challenge that the project is facing now is scarcity of budget as the project is on its transition from sponsorship based to program based ,which might also be a result of failing to make a risk management plan earlier and scope creep.

5.2. Conclusion

Here, it is possible to conclude that there is successful adoption of green project management knowledge areas in Forever Samara-logtiya Projects. Especially those knowledge areas like project integration, time, cost, quality, HR and stakeholder management areas are practiced at good scale. Though the quantitative result shows communication management is also practiced well s, the researcher took the subjectivist and that there is a communication gap and lack of training from the qualitative assessment and uncertainty of most of the respondents while asking if a certain project management area of practice is implemented or not. Similarly, it is concluded from the qualitative result that the HR management practice is not performed at good level, even though the quantitative results show above average results. On the other hand, knowledge areas like scope management and risk management have low levels of practice. Whereas management areas like procurement management were not practiced at full scale which means some of the processes are practiced while the others are not. In general, the findings show that the project has practiced most of the knowledge areas properly and can be considered as a successful project in terms of adhering to the 10 knowledge areas.

Regarding challenges of project management practice insufficient knowledge and skill as well as not giving much attention to the project management techniques are noted.

Based on the results of five-point “Likert scale”, frequency of agreeableness and qualitative interview results Green Project management knowledge areas practices in this study achieved above average level.

5.3. Recommendation

Based on the results found from the quantitative and qualitative assessments the points outlined below are recommended.

- It's recommended to keep up the good work on the practices that were considered successful.
- The project staff needs to get consecutive technical training to be on the same page with the management team.
- The management may increase the level of attention to the technical practices of project management.
- Processes of scope management practices like collecting requirements from stakeholders, developing scope management plan and controlling changes to the scope should be practiced so that the project would not be challenged by scope creep.
- Risk management processes like identifying and registering risks, prioritizing risks based on their estimated implications, monitoring the identified risks and developing a risk mitigation plan is expected from the project management team as soon as possible.
- Sharing the good management and other practices to other similar NGO"s is also recommended from the researcher.

5.4. Suggestion of further studies

The study considered only SFP, future researchers can consider carrying out a similar study in different sectors or may compare and contrast other similar sectors with SFP to assess level of practice and explore how the results obtained when the methods applied in this study are applied in other contexts. Studying the practice of project management in correlation with project success of the same NGO can also be another title of study. It might also be very interesting for social workers or Geological experts to study the Geological status of the orphans either in comparison with the delivered services and the set up or in contrast with other orphans raised in other setups.

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