International Journal of Scientific Research and Management (IJSRM)
||Volume||12||Issue||04||Pages||48-60||2025||
Website: https://ijsrm.net ISSN (e): 2321-3418
DOI: 10.18535/ijsrm/v12i04.eps01

Examining the Effectiveness of Project Management in the Agricultural Sector of Sierra Leone

[1]Haja Isata Fofanah (MBA), [2]Mohamed Syed Fofanah (PhD), [3]Daniel Bob Kaitibi (PhD)

[1]Department of Accounting and Finance, Faculty of Business and Entrepreneurship Studies
Eastern Technical University, Sierra Leone
[2]Department of Industrial Technology, School of Technology - Njala University, Sierra Leone
[3]Department of Physics and Computer Science, School of Technology, Njala University, Sierra Leone

Abstract
Sierra Leone, like in most developing countries, faces acute problem of projects failure, more especially agricultural projects, due to the short fall of project management best practices.
The study employed descriptive quantitative and qualitative research design and employed judgmental sampling in the selection of 60 respondents from four Agricultural Projects in the Ministry of Agriculture Forestry and Food Security (MAFFS).
The results presented for all the phases from planning to implementation of the projects investigated revealed that best project management practices, to a very large extent, were followed by the Projects Implementation Units (PIUs) of MAFFS.
The study further revealed effective management of resources as resources were available on time, projects tracked against their plan, their were effective communications, and effective monitoring and evaluation of most of these agricultural projects.

Keywords: Best project management practices, agricultural sector, monitoring and evaluation, poverty reduction strategy, donor funded projects

1. Introduction

The Sierra Leone economy is based largely on two sectors, which are agriculture and mining. The agriculture is the dominant sector in the economy, accounting for almost half of the country's GDP. It is considered being the largest employer with around 80% of the population working in the sector and two thirds of the population involved in subsistence agriculture. Irrespective of the population engaged in the agricultural sector, the country is not self-sufficient in food, especially rice which is the country's staple food and one of the country's biggest imports.

Agriculture being the major economic activity in the country, a sustained growth in the agricultural sector has a very high potential to contribute to poverty reduction and economic growth in the country. The sector provides greater employment opportunity to larger proportion of the population.

Sierra Leone has gone through a civil war that started in 1991 and lasted for about 10 years. The ministry of agriculture and food security (MAFFS) was one of the worst affected institutions by the civil war, as virtually all its infrastructure and facilities were destroyed. Many farms and rural areas were abandoned and villages were burned down as a result of the war.

The Government of Sierra Leone was very proactive in addressing the problems left behind by the civil war by revitalizing the agricultural sector through the support of development partners. Most of these supports have been in the form of donor funded projects which mainly focused in providing agricultural infrastructure, inputs (seeds, equipment), training of farmers and agricultural technology dissemination among others. There has also been seriously government interventions in the form of policies aimed at creating an enabling environment, encouraging investment in the sector and directing the sector towards growth, improved and sustained productivity. The government placed agricultural and food security at the top of a medium-term growth and development programme "the agenda for change". The 2nd generation poverty reduction strategy paper (PRSP II) made specific emphasis on "promoting commercial agriculture

through private sector participation" as a major strategy.The 3rd generation PRSP "the agenda for prosperity" also emphasised the importance of improving the agriculture sector in it 1st and 2nd pillars.

Some of these donor-funded projects in the Ministry of Agriculture and Food Security include: (a) Coalition for Africa Rice Development (CARD)-is a consultative group of bilateral donors and regional and international organisations working in collaboration with rice producing African countries to increase rice production. (b) International Fund for Agricultural Development (IFAD)-is a network devoted to rural development and the fight against poverty in Africa. It provides loans and grant to agricultural related projects in Sierra Leone. (C) Japan international cooperation agency (JICA)-JICA aims to be a good partner for developing countries, accurately grasping their changing needs through a focus on the field and promoting their own self-help effort swiftly and effectively through a focus on result. (d) The food and agriculture organisation (FAO) - FAO has been involved in providing start up tools and equipment for rural farmers. (e) The integrated rural development project (IRDP)-is financed by the Islamic development bank (IDB) for the establishment of rice seed banks across the country. (f) The Africa development bank (ABD)-ADB is the main donor that is extending development assistance to the agricultural sector of the country. For instance it provided grant for feasibility study on swamp areas for increased food production and development programmes in livestock, forestry and urban agriculture, and also fisheries development. (g) The agricultural sector rehabilitation project (ASREP)-it main goal is to expand agricultural production and increase farmers income. (h) NERICA dissemination project-the objective of this project is to test, multiply and extend NERICA rice dissemination (i) Food Systems Resilient Project (FSRP).

1.1 Problem Analysis

Everyone is a project manager but not everyone knows how to plan and manage a project. Most Project Managers implement projects without having the required project management training. Hence lack a practical method and a technique for getting the work done effectively and efficiently as they could not organized and planned pooling together of essential resources mainly materials, manpower, tools and capital (funds) for the successful completion of a project. Most of these project managers have acquired knowledge professionally in other fields of study other than project management. They lack the requisite knowledge about best practices in project management based on the accepted principles of management used for planning, estimating, and controlling work activities to reach a desired end result, within budget, and according to specification and because of these they are always prone to failure due to poor knowledge in Project Management.

Huge number of projects gets started without considering where the projects will lead. The greatest danger is that decisions made in haste or on the spur of the moment will have to be reversed later or will prove too costly to implement, meaning these projects may have to be abandoned basically due to lack of best project management practice. According to Harold kerzner 2010, best practices as those procedures, processes or practices which a company or project applies to other similar situations because they have proved to be valuable or successful in the past and they can be assumed to be successful again in the future.

Sierra Leone, like in most developing countries, faces acute problem of projects failure due to the short fall of project management best practices . Most projects plans lack structure and details; some projects are under-budgeted with insufficient resources allocation, or they are not tracked against their plans, project team not communicating or projects stray from their original goals mainly due to poor project monitoring and evaluation.

Project monitoring and evaluation (M&E) are essential components for a successful project implementation. Monitoring and evaluation is the process that helps improve current and future management outputs, outcomes and impact of projects. It is mainly used to assess the performance of project and programmes set up by governments, international organisations and NGO's. Many projects fail because of lack of proper M & E practices, especially in the government sectors where projects are poorly monitored. Some projects, especially politically motivated projects, are a solution in search of a problem as only the project team is interested in the end result and no one is in charge.

Therefore. if there is high level of project failures in the agriculture sector in Sierra Leone, it may be due to the lack of effective project management practices. This implies that something must be done to improve on the effectiveness of the project management practices in the agriculture section in Sierra Leone.

1.2 Aim and Objectives

This study aims at reducing the failure rate of projects in the agricultural sector in Sierra Leone, through provision of information that could contribute to the adoption of best project management practices.
To achieve this aim, the study looked at the following specific objectives:
(a) Identifying project management best practices adopted by some of the projects in the agricultural sector
(b) To identify factors that help improve on the proper monitoring and evaluation of agricultural projects.

2. Literature Reiview

The effectiveness of project management mostly depends on the adoption of the project management best practices. Wideman (1990) defined best practices as "a strategy, approach, method, tool, techniques that is particularly effective in helping an organisation to achieve its objectives for the management of a project". Tom Mochal (2009) also gave ten points which he considers as the best practices for successful project management that are applicable in any project irrespective of size, industry or region of the globe: plan the work by utilising a project definition document, create a planning horizon, define project management procedures upfront, manage the work plan and monitor the schedule and budget, look for warning signs, ensure that the sponsor approves scope-change requests, guard against cope creep, identify risk up front, continue to assess potential risks throughout the project and resolve issues as quickly as possible.

According to Tom Mochal (2009) there are laid credence to the project management best practices. John J. Lawlor (2010) in his article " Successful Project Management" highlighted eight steps that he considered as the best practices for effective project management: get management and stakeholder commitment, define scope, goal and objectives, have a written plan, manage project resources and encourage team working, management communications, manage suppliers and external sub-contractors, put in effective processes and close project.

Jason Freih (2010) in his article "Ten principles of good project management" outlined the following which he regarded as the best practices in project management that can work in any type of project: establish the goal of the project, get involved early, plan the project, write down all-important issues, encourage effective communication, address all issues quickly and don't stop until a resolution has been found, don't be afraid to replace bad people, lead by example, don't compartmentalise your staff and don't lose your focus.

Peerasit and Aronson (2013) in a research exploring the relevance of team culture in managing a group of multiple projects (MGMP) revealed that organisational culture and team management competency have a significant direct effect on the success of a project in MGMP. This implies that to ensure the success of projects in this setting, instead of establishing a team culture which is sensitive to the dynamics of (MGMP), senior management must create an organisational culture that supports project management. Terry Cooke-C-Davies (2002) in his empirical research tried to identify twelve factors that he thinks are in one way or the other critical to project success. His findings showed that the twelve factors are all factors that have been implemented in large multi-national or national organisations. The twelve factors included: project process, project scope management, risk management etc. This view was supported by Peerasit et al (2008) who carried out an exploratory research into the Management of Group of Multiple Project (MGMP) and found out that the effectiveness in MGMP depends on the influencing factors with respect to project assignment, resource allocation, organisational culture, project management process and competences of the multiple project managers. A critical look at this factors shows that they are also applicable to single projects and hence they could become influencing factors for any project whether single or multiple projects. Dooley et al (2006) examined the theory of project and multiple projects management and developed a framework tool to facilitate the management of multiple projects across an organisation and enhance the overall effectiveness of the process. The findings highlighted that greater organisational efficiency and less conflict can be achieved through greater structure and understanding of the intricacies of managing multiple projects. According to Iman Attarzadeh and Hock Ow (2008) in a descriptive qualitative study into the project success and failure, the project classification and the factors that contribute to project success or failure, the findings showed the poor planning and scheduling are the main reasons for project failure. According to Andrew Grimes (2009) identified the following as best practices in effective project management: building confidence within the whole project team, manage change, planning, communication, risk analysis, problem solving and quality control.

The project management team relies on the project management methodology, which is a structured set of techniques and tools used for solving specific project problem, in order to successfully deliver project result. The final goal of the methodology is to increase the probability for successful project delivery (Kerzner,

2001). A more detail methodology achieves high quality project results, simplification, control and process improvement (Nelson, Ghods & Nelson, 1998).

Monitoring and evaluation are key components of effective project management as they intimately linked project management functions and as a result there is lot of confusion in trying to make them work on projects. Easly and Kumar (1986) disproved the use of the acronym M&E (monitoring and evaluation) as it looks at a single function without making a clear distinction between the two. According to UNFPA (2004) monitoring is a process that continuously track performance against planned by collecting and analysing data indicating established for monitoring and evaluation purposes

According to IFAD (2004) states that evaluation should be as objective as possible so that the information provided is as credible as possible and is not questionable (IFAD 2004). Shapiro (2004) emphasizes that evaluation compares the project impact with what was set to be achieved in the project after implementation. It does not recognise the midterm evaluations that tend to look at the continued relevance and sustainability of the project and the impact that the project has had even before completion.

Another key consideration for effective project management is the methodology adopted. The Project Management Institute (PMI 2008) defines project management methodology as a set of methods, techniques, procedures, rules, templates and best practices used on a project. Charvat (2003) also defines project management methodology as a set of guidelines and principles that can be tailored and applied to specific situation, where guidelines could be as simple as task list.

One of the project management tools that can be used to effectively execute and complete a project successfully is the Gantt Charts. This is a graphical presentation of the execution activities depicted as a time scale bar line. It is a scheduling tool where the time of each activity is represented as a horizontal bar with the length of the bar proportional to the duration of the proposed activity. The grant owes its origin to Henry Gantt in the early 1990s where it was used as a special PM tools.

One of the most widely used project management methodology is PRINCE 2, which is a structured project management method consisting particularly of defined processes and techniques (office of governance commerce 2002, 2009).

3.0 Methodology

3.1 Research Design

This study employed descriptive quantitative and qualitative research design.

3.2 Study Population

The population for this study comprised of four different donor funded agricultural projects under the Ministry of Agriculture Forestry and Food Security (MAFFS), which includes; Linking farmers to the market (LFM), Small Holders Commercialization Project (SCP), Rural development and private sector development project (RDPSDP) and Sustainable rice development project (SRDP).

The questionnaire were sent to project development and management officers, project coordinators, senior staff members and senior supporting staff members that are involved in project implementation within the various projects.

3.3 Sample Size and Selection Techniques

The research employed judgmental sampling; a non-probability sampling technique whose approach allowed the researcher to use their discretion in choosing participants believed to possess relevant knowledge regarding the study.

A sample size of 60 respondents were targeted for the study drawn from project development and management officers, project coordinators, project staff members and beneficiaries that were involved in the selected projects implementations as presented in Table 1

Table 1: Sample size selection

Project	Category of respondents				Sample size(SS)
	Project development and management officers	Project coordinators (PC)	Project staff members	Project beneficiaries	

	(PDMO)				
Linking Farmers to the Market (LFM)	2	1	7	5	15
Smallholders Commercialization Project (SCP)	2	1	7	5	15
Rural and Private Sector Development Project (RPSDP)	2	1	7	5	15
Sustainable Rice Development project (SRDP).	2	1	7	5	15
				Total	**60**

3.4 Sources of Data

Structured questionnaires were designed to obtain primary data from the targeted respondents which ensured current and relevant data directly related to the topic under investigation were collected . Secondary sources were also used to collect relevant information drawn on existing resources such as internet, journals, electronic articles, and other pertinent literature to achieve the research objectives.

3.5 Data Collection Techniques

This study employed two primary data collection techniques: face-to-face interviews and self-administered questionnaires. The questionnaire included both closed and open-ended questions, allowing for the collection of both quantitative and qualitative data.

A pilot survey was conducted in order to test the contents of the questionnaire by taken a sample of targeted population. This serves as a demonstration to check the interviewer's understanding of the study, to test whether additional questions were needed, respondents understanding of questions and check for omissions of questions. After the pilot exercise, the questions were revisited and issues that were unclear were addressed and the final questionnaire administered to respondents.

3.6 Data Analysis Method

The collected data were organized and analyzed using the Statistical Package for the Social Sciences (SPSS) and MS Excel, which presented meaningful interpretations of data collected in for of graphs thereby presenting a comprehensive understanding of the research findings.

4.0 DISCUSSION OF RESULTS

Four key objectives considered to contribute to the effectiveness of project management were discussed namely (a) Identifying the various project management best practices adopted by the projects under investigation. (b) Assessing whether proper monitoring and evaluation is effectively carried our by the projects under investigation. (c) To determine the effective use of project management tools and Methodologies (d) To assess the types and number of project management training workshops attended by staff of projects under investigation

4.1 Identifying the various Project Management Best Practices adopted by the Projects under Investigation

In Africa, particularly West Africa, most projects are donor funded project and therefore the projects are usually obliged to follow the project management practices of the funding agencies which are usually foreign or international organisations such as the European Union (EU),the United Nations(UN),the Africa Development Bank (ADB) etc. The problem in this instance is whether these project management practices have been followed judiciously.

To determine project management best practices, clearly define project goals and objectives, establish a detailed plan, manage resources and risks effectively, communicate transparently, and continuously evaluate and improve processes.

Assessing problem definition of the project

The researchers were interested to know the key players in identifying the agricultural problems faced by farmers as presented in Figure 1.

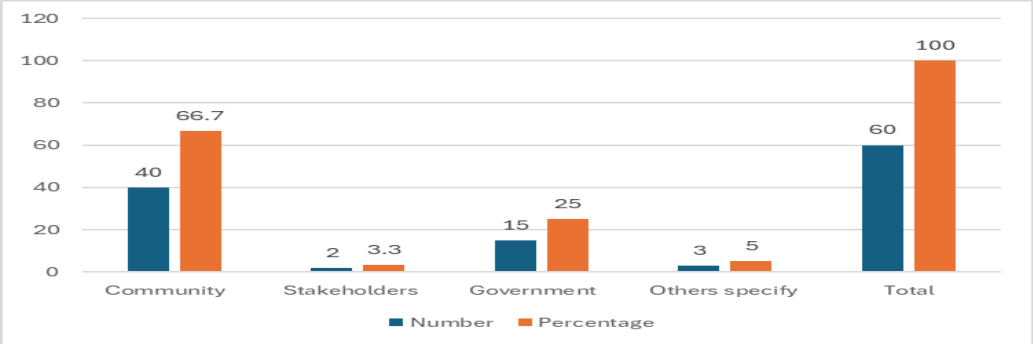

Figure 1: Identification of problem

Figure 1 revealed that 66.6% of agricultural problems such as crop failure, low agricultural productivity, poor road networks and market infrastructures were identified by the community farmers themselves while 25% done by Government intervention. Projects stakeholders, to some limited extent (3.3%), may also involve in the problem identification. For a project not to be a solution in search of a problem, community beneficiaries should be a party in identifying the problem that is affecting their communities.

Furthermore, the researchers prone into how these agricultural problems were identified. Figure 2 showed that 58.3% of the problems were identified through need assessment survey and 25% by government intervention.

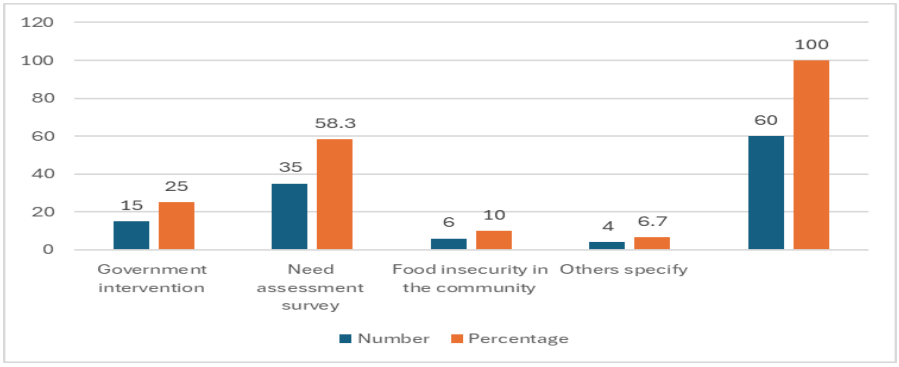

Figure 2: Methods used to identify the problem

4.2 Aligning Problem to the Goals and Objectives of the Projects

83% of respondents said the problems identified was related to the goals and objectives of the project as they followed the best project management practices in project design by developing problem trees, objective trees and strategy trees which eventually resulted to the relevant goals and objectives of the projects as presented in Figures 3 and 4 respectively. A professional development of the problem-objectives-strategy trees leads to the production of adequate logical framework or logframe matrix which outlines the goal, objectives/purpose, results/outcomes/outputs and eventually the activities with corresponding objectively verifiable indicators (OVIs), means of verification (MOV) as well as assumptions and expected risks of the project.

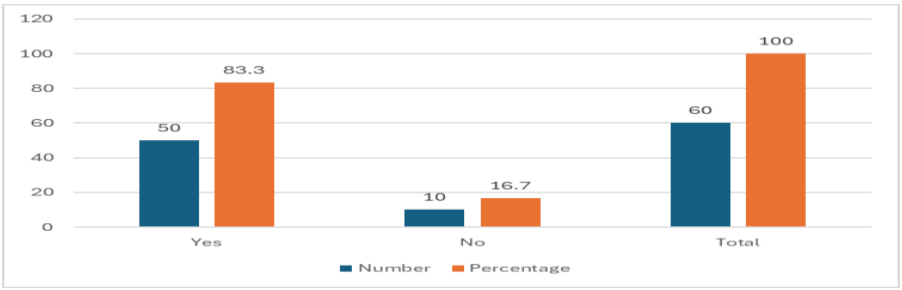

Figure 3: Whether the problem identified is related to the goals and objectives of the projects

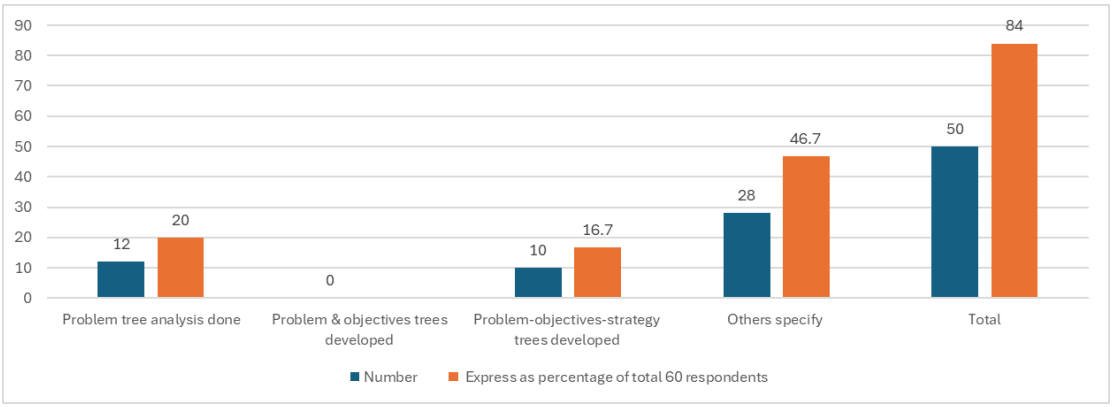

Figure 4: Reasons provided by respondents who said the problems were related to the goals and objectives

An assessment done on who managed the resources revealed that the project team, specifically the Project Manager (85%), and to a little extent by the community (3.3%) and MAFFS (8.7%) as presented in Figure 5.

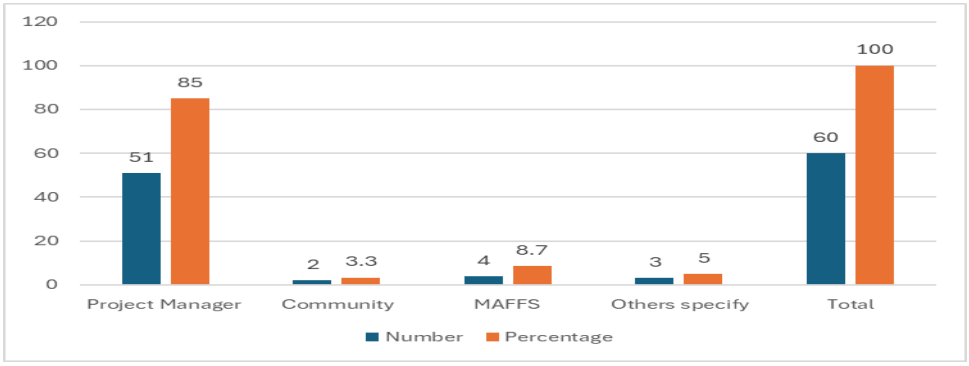

Figure 5: Management of resources

Furthermore, the researchers investigated how well the resources were managed. From the results presented in Figure 6, 16.7% of the respondents said the resources were very effectively managed while 63.3% of them agreed that there was effective managed of resources. Only 6.7% said the resources were not effectively managed as showed in Figure 6.

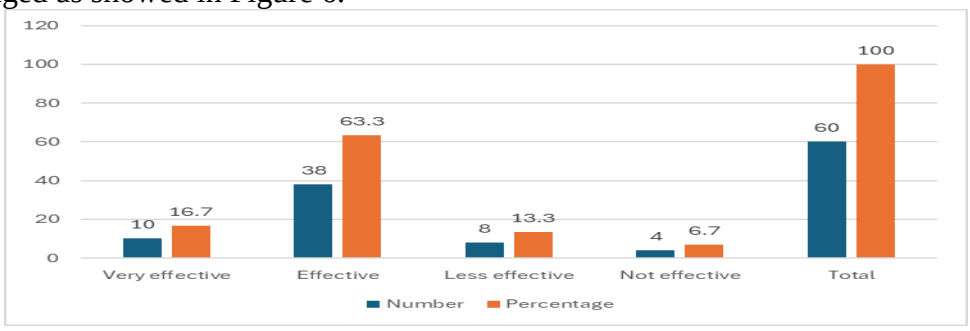

Figure 6: Effectiveness of resources management

A further prone into reasons for the effective management of resources showed that resources were available on time (31.7%), projects tracked against their plan (21.7%), their were effective communications (18.3%), and some evidence of trained project staff as presented in Figure 7.

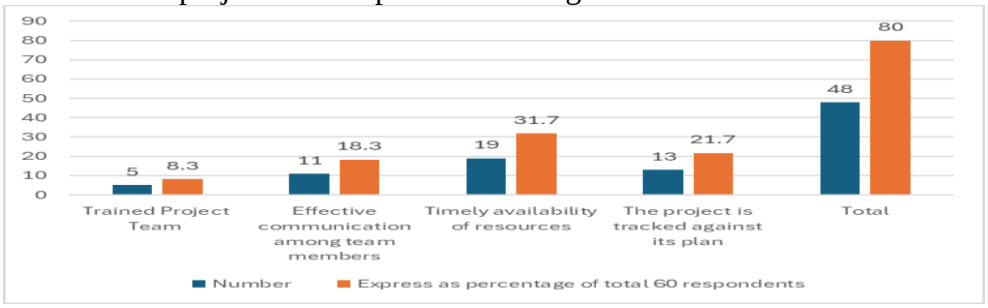

Figure 7: Reasons for effective resources management

The researchers assessed the risks faced by these agricultural projects during implementation and how such risks were mitigated. Key among the risks identified according to respondents included non availability of

agricultural machinery, effect of climate change, supply of non viable seeds, soil infertility and to a very little extent poor supervision as shown in Figure 8.

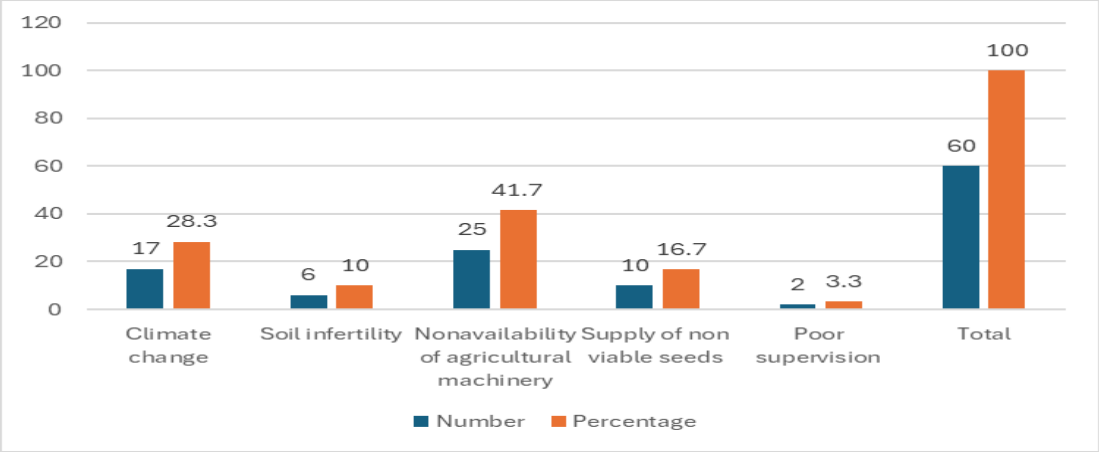

Figure 8: Risks identified during projects implementations

To mitigate these risks, the project teams adopted the following measures: developed contingency plans, adaptation of risk management plan, climate change adaptation and effective monitoring and evaluation strategies as presented in Figure 9.

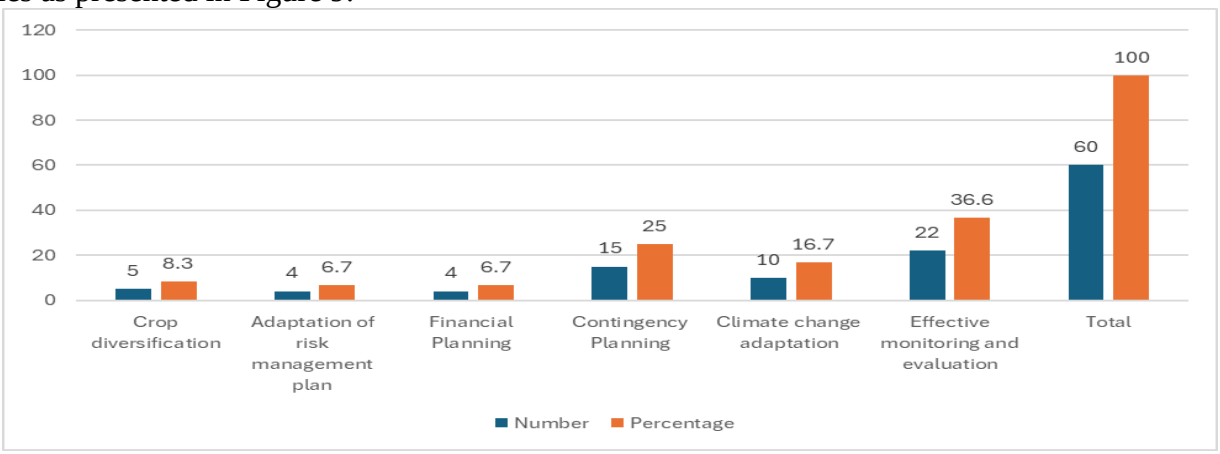

Figure 10: Risk mitigation strategies adopted

4.3 Assessment on the project planning adopted

In assessing the projects planning phases, the Researchers considered who identified projects activities, estimated project cost and duration, sequencing of activities, and determination of critical activities. From the respondents, 40% of the planning was done by the Project Consultants and community, 30% by Project Team and 25% by Project Stakeholders and 5% by donors as presented by Figure 11.

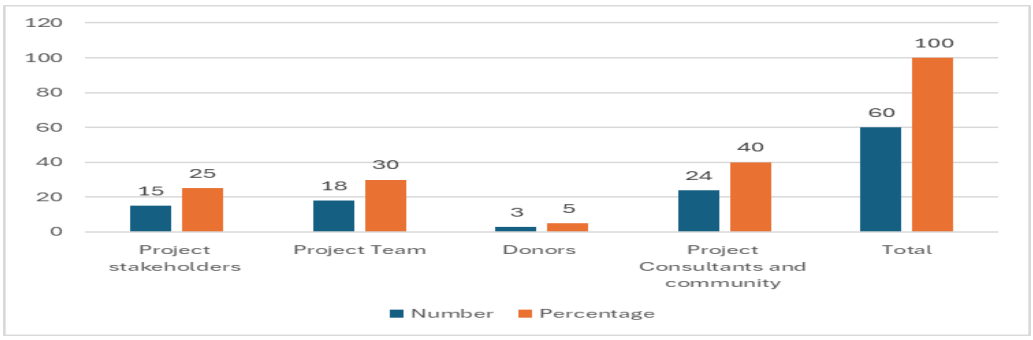

Figure 11: Project parties responsible for the planning phase of the projects investigated

Estimation of cost and duration of project activities was mainly done by the Project Team and Project Consultants as presented in Figure 12.

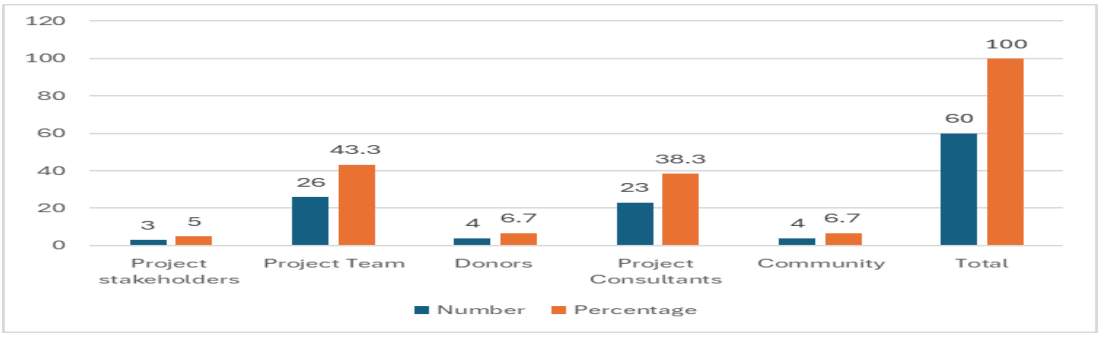

Figure 12: Parties responsible for estimation of cost and duration of activities

According to respondents, critical activities of the projects were mainly determined using Activity on Arrow (AOA) notation (58.3%) and Activity on Node (AON) notation (16.7%)as shown in Figure 13. Two main methods were adopted in the Activity on Arrow notation which were Critical Path Method (CPM) and Programme Evaluation and Review Technique (PERT). For projects using Activity on Node notation, Precedence Diagramming Method (PDM) to some very little extent, the Graphic Evaluation and Review Technique (GERT) were used as presented in Figure 14 and Figure 15 respectively.

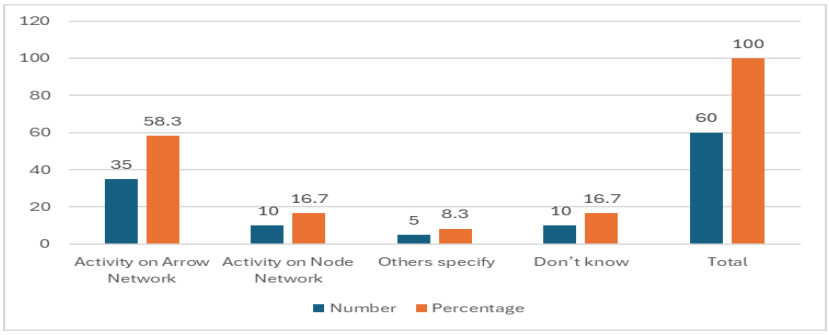

Figure 13: Determination of critical activities

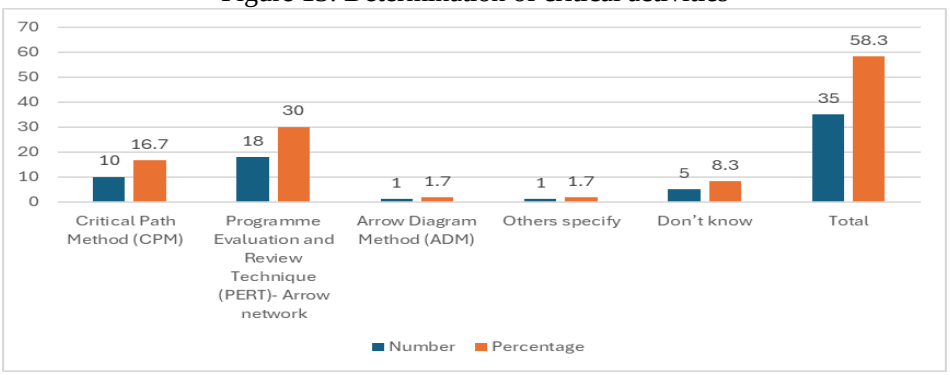

Figure 14: Type of AOA network used to determine critical activities

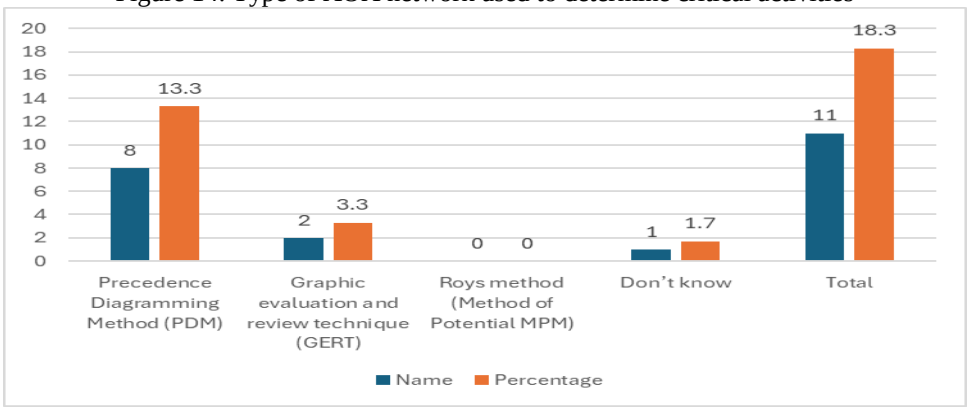

Figure 15: Type of AON network used to determine critical activities

From the results presented for both the definition and planning phases of these projects, a conclusion could be drawn that most of the projects implemented by the Ministry of Agriculture Forestry and Food Security (MAFFS) Projects Implementation Units (PIU) followed effective project management best practices.

4.5 Project Implementation

In project implementation phase, two key components considered were how projects were organized, controls put in place and closing procedure adopted that follow best project management practice.

Project Organization

In the project organization phase, the researchers were interested to know who determined personnel needs, recruited the project team and project managers, and control measures put in place.

The study revealed that 93.3% of projects recruitment as well as the determination of personnel needs was done by the Project Management Implementation Unit (PIU) of MAFFS and to a very little extent by Donors (3.3%) and projects stakeholders as shown in Figure 16.

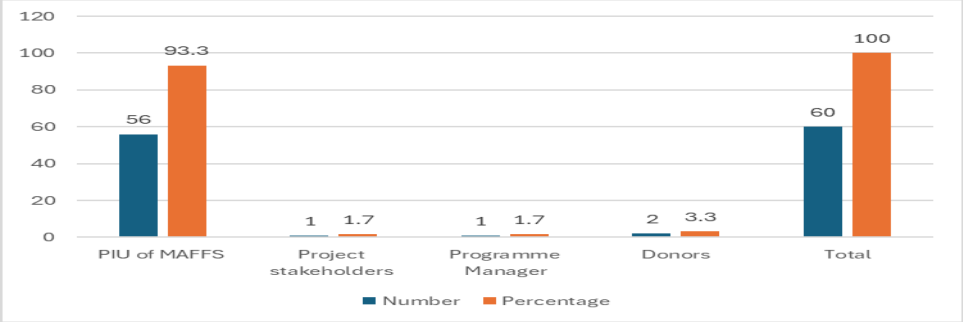

Figure 16: Persons responsible for recruitment of staff

95% of respondents said the projects were using appropriate project management control tools mainly the Participatory Performance Tracker (PPT), the Ghatt Chart, Microsoft project and Smartsheet as presented in Figure 17.

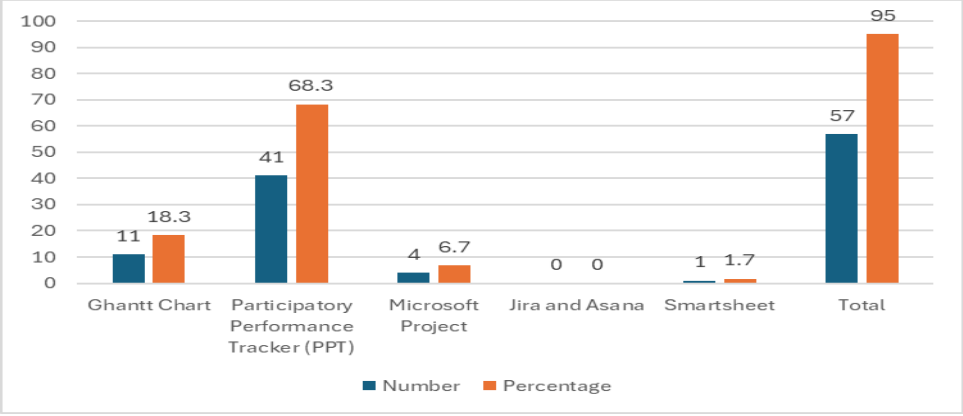

Figure 17: Control tools used in monitoring the projects

The researchers also found out that project status reports were prepared mostly on weekly bases as shown in Figure 18

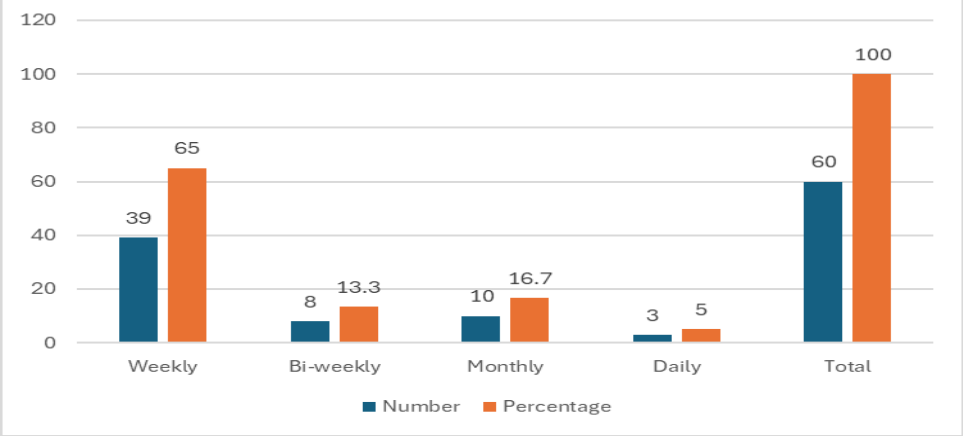

Figure 18: Status reporting of project activities

Results of the assessment done on the review of projects schedules showed 51.7% of respondents who said projects schedules were seldomly reviewed while 41.7% said schedules were frequently reviewed.

Furthermore, the researchers prone into whether change orders were issued in events of addendum, revision of designs. modification to the scope, schedule, or cost based on client requests or other reasons. 70% of respondents said change orders were issued and circumstances under which these change orders were issued is presented in Figure 20.

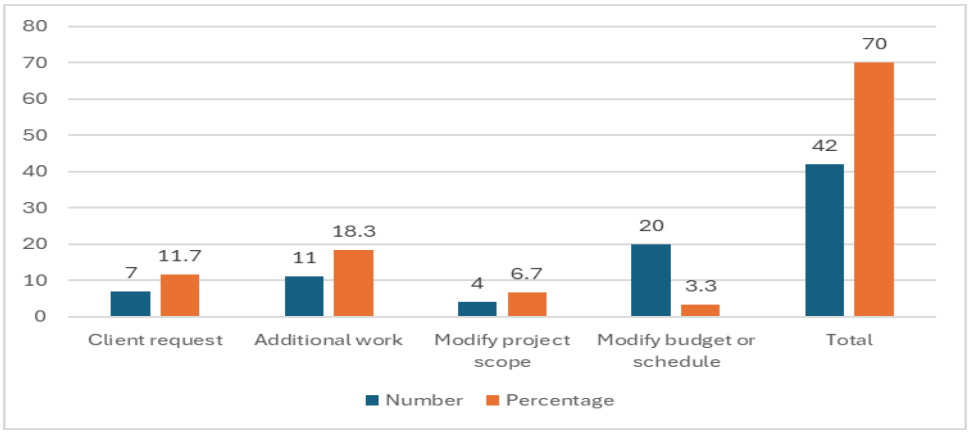

Figure 20: Circumstances under which change orders were issued

4.6 Project Closing Protocols

The project closing phase is a very important component of project implementation as it summarizes the success of the project. Here the researchers investigated (a) clients acceptability of the delivered projects, (b) type of deliverables installed, (c) whether proper project documentation done and final report issued (d) post implementation audit done.

From the results presented in Figure 21, 61.7% of respondents, to a large extent, were satisfied with the projects in reaching their objectives and goals while 13.3% were, to some extent satisfied as they had different views about some of the projects. Few of these agricultural projects were not completed and failed due to late supply of logistics, seasonal variation, poor monitoring and the absence of effective community participation.

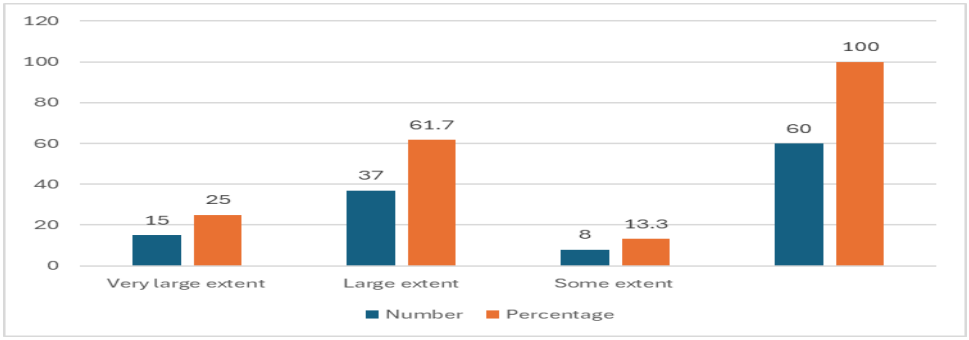

Figure 21: Extent of clients satisfaction on the delivered projects

Furthermore, proper projects documentations was done and final reports submitted for most of the projects as revealed by Figure 22.

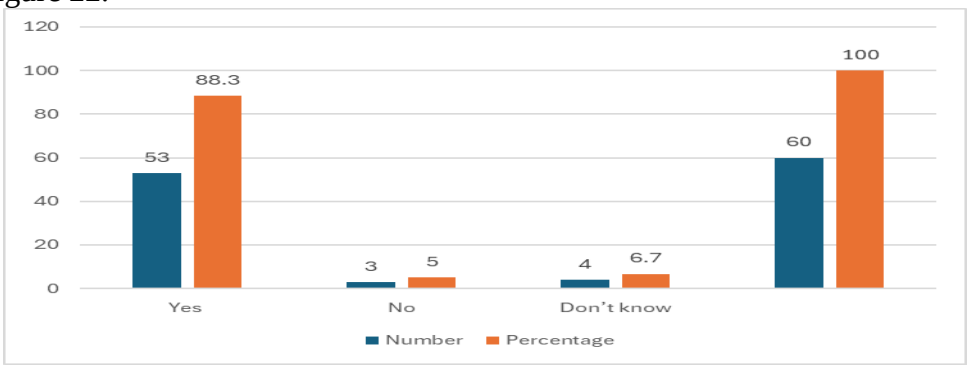

Figure 22: Proper projects documentations and submission of final report

5.6 Conclusion

Agriculture is the dominant sector in the economy of Sierra Leone, accounting for almost half of the country's GDP. It is considered being the largest employer with around 80% of the population working in the sector and two thirds of the population involved in subsistence agriculture.

Sierra Leone, like in most developing countries, faces acute problem of projects failure, more especially agricultural projects, due to the short fall of project management best practices. Most projects plans lack structure and details; some projects are under-budgeted with insufficient resources allocation, or they are not tracked against their plan, project team not communicating or projects stray from their original goals mainly due to poor project monitoring and evaluation. This implies that something must be done to improve on the effectiveness of the project management practices in the agriculture sector in Sierra Leone.

This study aims at reducing the failure rate of projects in the agricultural sector in Sierra Leone, through provision of information that could contribute to the adoption of best project management practices.

The study employed descriptive quantitative and qualitative research design and employed judgmental sampling in the selection of 60 respondents from four Agricultural Projects in the Ministry of Agriculture Forestry and Food Security (MAFFS).

The results presented for all the phases from planning to implementation of the projects under investigation revealed that best project management practices, to a very large extent, were followed. 58.3% of the problems were identified through need assessment survey and 83% of respondents said the problems identified aligned with the goals and objectives of the projects which justifies best project management practices.

The study further revealed effective management of resources as resources were available on time, projects tracked against their plan, their were effective communications, and effective monitoring and evaluation of most of these agricultural projects.

References

1. Kerzner, Harold K 2010: Project Management - Best Practices: Achieving Global Excellence 2nd (second) Edition by Kerzner, Harold R., International Institute for Learning published by Wiley
2. Weiss, Joseph W., Wysocki, Robert K. (1992): 5-Phase Project Management: A Practical Planning & Implementation Guide. Perseus Books Publishing, Cambridge, Massachusetts
3. Wideman Max (1990): Total Project Management of Complex Projects Improving Performance with Modern Techniques. AEW Services, Vancouver, BC https://www.researchgate.net/publication/228467516
4. Tom Mochal (2009): 10 best practices for successful project management. TechRepublic's Resource Library *(www.technrepublic.co*)
5. Lawlor, John A., Bilson, A. (2010): Social work management and leadership: Managing complexity with creativity. Social Sciences Publications. https://bradscholars.brad.ac.uk/handle/10454/6343
6. Jason Freih (2010): 10 Principles of Good Project Management. https://www.projectsmart.co.uk/best-practice/
7. Aronson, Zvi H. Shenhar Aaron J. , Peerasit Patanakul (2013): Managing the Intangible Aspects of a Project: The Affect of Vision, Artifacts, and Leader Values on Project Spirit and Success in Technology-Driven Projects. Wiley online Library. https://doi.org/10.1002/pmj.21322
8. Terry Cooke-Davies (2002): The real success factors on projects. International journal of project management 20 (3), 185-190
9. Iman Attarzadeh And Hock Ow (2008): Project management practices: the criteria for success or failure. Communications of the IBIMA, academia.edu
10. Kerzner, H, 2025: Project management: a systems approach to planning, scheduling, and controlling. books.google.com
11. Mario Špundak (2014): Mixed Agile/Traditional Project Management Methodology – Reality or Illusion? Procedia - Social and Behavioral Sciences Volume 119, Pages 939-948
12. IFAD (2004)
13. Shapiro, A. (2004). How including prior knowledge as a subject variable may change outcomes of learning research. American Educational Research Journal, 41, 159-189. doi:10.3102/00028312041001159.
14. The Project Management Institute (PMI 2008)

15. Charvat, J. (2003). The Project management methodologies: Selecting, implementing and supporting methodologies and processes for projects. Hoboken, NJ: John Wiley & Sons Inc.
16. Peerasit Patanakul, Dragan Milosevic (2008): The effectiveness in managing a group of multiple projects: Factors of influence and measurement criteria. International Journal of Project Management 27(3). DOI:10.1016/j.ijproman.2008.03.001

Contributions

Haja Isata Fofanah (MBA Project Management): Data collection, data analysis and initial write up of manuscript.
Mohamed Syed Fofanah (PhD): Data analysis, review and final write up of manuscript
Daniel Bob Kaitibi (PhD): Data analysis and initial write up of the manuscript