# Evaluating the Effectiveness of Project Management Knowledge Areas in Achieving Project Success in Non Governmental Organizations in Chipata District, Zambia

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Abstract:- A Project management Knowledge Area represents a complete set of concepts, terms, and activities that make up a project management field. Project Management Knowledge Areas include: Project Integration Management; Project Scope Management; Project Time Management; Project Cost Management; Project Quality Management; Project Human Resource Management; Project Communications Management; Project Risk Management; Project Procurement Management; and Project Stakeholder Management. Therefore, Project Management Knowledge Areas are used on most projects most of the time to achieve project success. To this effect, project teams should be able to understand and utilize Project Management Knowledge Areas appropriately, according to specific projects. However, studies have revealed that despite Project teams utilizing Project Management Knowledge Areas, project failure occurs, thereby not achieving project success. The general objective of the study was evaluating the effectiveness of the Project Management Knowledge Areas in achieving project success and the study sought to answer the general research question on: How effective were the Project Management Areas in achieving project success?

Pragmatism was the philosophical view that underpinned that informed the mixed research method approach used. The convergent parallel strategy of the mixed research methods approach was used. The total population was forty (40) Managers from active Non-Governmental Organizations and Twenty-nine (29) were selected as a sample size, using purposive sampling method. Qualitative data was analyzed by using the inductive process of building from the data to broad themes and then to interpretation. Quantitative data was analysed by using descriptive statistics. Findings revealed that most of the respondents indicated agreement to the application of Project Management Knowledge Areas within the organization, except one Project Management Knowledge Area (Project Time Management) where the majority disagreement. Further, all the respondents acknowledged that they had good competence in the understanding and application of the Management Knowledge Areas within their organizations. Subsequently, most of the respondents indicated agreement with regards to the application of Project Management Knowledge Areas in the communities where projects were implemented in order to achieve Project Success, except one Project Management Knowledge Area (Project Risk Management) where most respondents were undecided. The study concluded that Project Management Knowledge Areas were effective in achieving project success.

## I. INTRODUCTION

A Project management Knowledge Area represents a complete set of concepts, terms, and activities that make up a professional field, project management field, or area of specialization (Zwikael & Meredith, 2019; Varajão, 2016; Project Management Institute-PMI, 2013). Therefore, Project Management Knowledge Areas are used on most projects most of the time to achieve project success. In this regard, project teams should be able to understand and Project Management Knowledge appropriately, according to specific project. There are ten Project Management Knowledge Areas namely: Project Integration Management, Project Scope Management, Project Time Management, Project Cost Management, Project Quality Management, Project Human Resource Management, Project Communications Management, Risk Management, Project Project Procurement Management, and Project Stakeholder Management (PMI, 2013). The general objective of the study was to evaluate the effectiveness of the Project Management Knowledge Areas in achieving project success and the study sought to answer the general research question on: How effective were the Project Management Areas in achieving project success?

Projects have been used by Government and Non Governmental Organizations as a vehicle to deliver developmental programs. In this regard, project success is dependent on the understanding and effective application of Project Management Knowledge Areas (Abdulla and Alshimi, 2019; Rabia, 2018; Cheng et al., 2017; Javel & Liu, 2017; Demirkesen & Ozorhon, 2017; Martina & Pavel, 2016; Mladen & Mariela, 2017; Muszynska, 2016; Arafa, 2015; Carvalho, 2015; Dumrake et al., 2015; Nibyiza, 2015). Knowledge Areas provide a detailed description of the process inputs and outputs along with a descriptive explanation of tools and techniques, most frequently used within the project management processes to produce each outcome (Bathallath et al., 2016; Chaves et al., 2016; Liberto et al., 2016; Murphy & Cormican, 2016; PMI,

2013). Studies have revealed that despite Project teams utilizing Project Management Knowledge Areas, projects failure occurs, thereby not achieving project success (Banda, 2019; Dyson, 2019; Christina & Panagiota, 2018; Huang *et al.*, 2018; Maltitz *et al.*, 2018; Naeem *et al.*, 2018; Ragasa *et al.*, 2018; Chilongo & Mbetwa, 2017; Dube & Mugwagwa, 2017; Simiyu, 2017; Kamau & Mohamed, 2015; Kasongo, 2015; International Fund for Agricultural Development, 2014).

### II. METHODOLOGY

Pragmatism was the philosophical view that underpinned the study and it applied to the mixed research method approach for this study. The convergent parallel strategy of the mixed research methods approach was used. The total population was forty (40) Managers from active Non-Governmental Organizations and Twenty-nine (29) were selected as a sample size, using purposive sampling method. A self administered questionnaire that had both open ended question (qualitative) and closed question (quantitative) was used to collect data. Qualitative data was analyzed by using the inductive process of building from the data to broad themes and then to a generalized model or theory. Quantitative data was analysed by using descriptive statistics.

## III. FINDINGS AND DISCUSSION

The findings and discussion are based on the research questions that provide answers on: The effectiveness of project management knowledge areas in achieving project success; Project teams' knowledge in understanding the application of project management knowledge areas; and Application of project management knowledge areas in the communities where projects are implemented. The outline of the findings and discussion is presents in three sections namely A, B, and C.

# > Section A

• How effective are project management knowledge areas in achieving project success?

In providing the answer the first research question, the following opinion were given by the respondents. As shown in Table 1, in acknowledging the most frequently applied Project Management Knowledge Areas within the organization in order to achieve Project Success, most of the respondents 44.8% indicated agreement that **Project Integration Management** (PIM) was applied in their organization (Mode=4, N=13, 44.8%).

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	1	3.4	3.4	3.4
Disagree	2	6.9	6.9	10.3
Neutral	3	10.3	10.3	20.7
Agree	13	44.8	44.8	65.5
Strongly Disagree	10	34.5	34.5	100.0
Total	29	100.0	100.0	

Table 1:- Project Integration Management

According to Table 2, in acknowledging the most frequently applied Project Management Knowledge Areas within organization in order to achieve Project Success, opinion by most of the respondents, 65% were in agreement with vis a vis the application of **Project Scope Management** in their organization (Mode=4, N=20, 65%).

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	1	3.4	3.4	3.4
Disagree	4	13.8	13.8	17.2
Neutral	4	13.8	13.8	31.0
Agree	10	34.5	34.5	65.5
Strongly Agree	10	34.5	34.5	100.0
Total	29	100.0	100.0	

Table 2:- Project Scope Management

In acknowledging the most frequently applied Project Management Knowledge Areas within organization in order to achieve Project Success, most of the respondents 44.8% indicated strong disagreement vis a vis **Project Time Management** application in their organization as indicated in Table 3 (Mode=1, N=13, 44.8%)

Likert Scale	Frequency	Percent	Valid Percent	Cumulative Percent
Disagree	3	10.3	10.3	10.3
Neutral	5	17.2	17.2	27.6
Agree	8	27.6	27.6	55.2
Strongly Disagree	13	44.8	44.8	100.0
Total	29	100.0	100.0	

Table 3:- Project Time Management

In acknowledging the most frequently applied Project Management Knowledge Areas within organization in order to achieve Project Success, most of the respondents, 55.2% indicated agreement vis a vis **Project Cost Management** application in their organization as presented in Table 4. (Mode=4, N=16, 55.2%).

	Frequency	Percent	Valid Percent	<b>Cumulative Percent</b>
Likert Scale				
Strongly Disagree	2	6.9	6.9	6.9
Disagree	3	10.3	10.3	17.2
Neutral	2	6.9	6.9	24.1
Agree	16	55.2	55.2	79.3
Strongly Disagree	6	20.7	20.7	100.0
Total	29	100.0	100.0	

Table 4:- Project Cost Management

In acknowledging the most frequently applied Project Management Knowledge Areas within organization in order to achieve Project Success, most of the respondents, 34.5% indicated agreement vis a vis **Project Quality Management** application in their organization as shown in Table 5. (Mode=4, N=10, 34.5%)

	Frequency	Percent	Valid Percent	Cumulative Percent
Likert Scale				
Strongly Disagree	2	6.9	6.9	6.9
Disagree	5	17.2	17.2	24.1
Neutral	5	17.2	17.2	41.4
Agree	10	34.5	34.5	75.9
Strongly Disagree	7	24.1	24.1	100.0
Total	29	100.0	100.0	

Table 5:- Project Quality Management

Table 6 indicates that, in acknowledging the most frequently applied Project Management Knowledge Areas within organization in order to achieve Project Success, most of the respondents, 37.9% indicated agreement vis a vis **Project Communication Management** application in their organization (Median=4, N=11, 37.9%).

	Frequency	Percent	Valid Percent	Cumulative Percent
Likert Scale				
Strongly Disagree	2	6.9	6.9	6.9
Disagree	6	20.7	20.7	27.6
Neutral	3	10.3	10.3	37.9
Agree	11	37.9	37.9	75.9
Strongly Disagree	7	24.1	24.1	100.0
Total	29	100.0	100.0	

Table 6:- Project Communication Management

Table 7 presents that, in acknowledging the most frequently applied Project Management Knowledge Areas within organization in order to achieve Project Success, most of the respondents, 37.9% indicated agreement vis a vis **Project Human Resource Management** application in their organization (Mode=4, N=11, 37.9%).

	Frequency	Percent	Valid Percent	Cumulative Percent
Likert Scale				
Strongly Disagree	2	6.9	6.9	6.9
Disagree	6	20.7	20.7	27.6
Neutral	3	10.3	10.3	37.9
Agree	11	37.9	37.9	75.9
Strongly Disagree	7	24.1	24.1	100.0
Total	29	100.0	100.0	

Table 7:- Project Human Resource Management

Table 8 indicates that, in acknowledging the most frequently applied Project Management Knowledge Areas within organization in order to achieve Project Success, most of the respondents, 37.9% indicated agreement vis a vis **Project Procurement Management** application in their organization (Mode=4, N=11, 37.9%).

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	2	6.9	6.9	6.9
Disagree	6	20.7	20.7	27.6
Neutral	3	10.3	10.3	37.9
Agree	11	37.9	37.9	75.9
Strongly Disagree	7	24.1	24.1	100.0
Total	29	100.0	100.0	

Table 8:- Project Procurement Management

Table 9 presents that, in acknowledging the most frequently applied Project Management Knowledge Areas within organization in order to achieve Project Success, most of the respondents, 37.9% indicated agreement vis a vis **Project Risk Management** application in their organization (Mode=4, N=11, 37.9%).

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	1	3.4	3.4	3.4
Disagree	2	6.9	6.9	10.3
Neutral	6	20.7	20.7	31.0
Agree	11	37.9	37.9	69.0
Strongly Agree	9	31.0	31.0	100.0
Total	29	100.0	100.0	

Table 9:- Project Risk Management

In acknowledging the most frequently applied Project Management Knowledge Areas within organization in order to achieve Project Success, most of the respondents, 48.3% indicated agreement vis a vis **Project Stakeholder Management** application in their organization. This information is indicated in Table 10 (Mode=4, N=14, 48.3%).

	Frequency	Percent	Valid Percent	Cumulative Percent
Opinion				
Disagree	8	27.6	27.6	27.6
Neutral	2	6.9	6.9	34.5
Agree	14	48.3	48.3	82.8
Strongly Disagree	5	17.2	17.2	100.0
Total	29	100.0	100.0	

Table 10:- Project Stakeholder Management

From the opinion the respondents most indicated agreement to the application of Project Management Knowledge Areas within organization except one Project Management Knowledge Area (Project Time Management) where the majority indicated disagreement.

### Section B

• What is project teams' knowledge in understanding the application of project management knowledge areas?

The following Tables present the opinions held by respondents with regards to knowledge and competence in understanding and application of the Management Knowledge Areas within their organizations in order to achieve Project Success;

In acknowledging knowledge and competence in understanding and application of the Management Knowledge Areas within their organizations in order to achieve Project Success, most of the respondents, 44.8% indicated Good Competence vis a vis **Project Integration management** as shown in Table 11.( Mode=4, N=13, 44.8%)

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Insufficient Competence	1	3.4	3.4	3.4
Sufficient Competence	4	13.8	13.8	17.2
Neutral	3	10.3	10.3	27.6
Good Competence	13	44.8	44.8	72.4
Very Good Competence	8	27.6	27.6	100.0
Total	29	100.0	100.0	

Table 11:- Project Integration Management

In acknowledging knowledge and competence in understanding and application of the Management Knowledge Areas within their organizations in order to achieve Project Success, most of the respondents 34.5 indicated Good Competence vis a vis Project Scope Management as indicated in Table 12. (Mode=4, N=10, 34.5%)

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Sufficient Competence	3	10.3	10.3	10.3
Neutral	7	24.1	24.1	34.5
Good Competence	10	34.5	34.5	69.0
Very Good Competence	9	31.0	31.0	100.0
Total	29	100.0	100.0	

Table 12:- Project Scope Management

In acknowledging knowledge and competence in understanding and application of the Management Knowledge Areas within their organizations in order to achieve Project Success, the opinion of most of the respondents 69% seem to be divided between Good Competence and very Good Competence vis a vis **Project Time Management** as presented in Table 13. )Mode=4, N=20, 69%)

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Insufficient Competence	1	3.4	3.4	3.4
Sufficient Competence	2	6.9	6.9	10.3
Neutral	6	20.7	20.7	31.0
Good Competence	10	34.5	34.5	65.5
Very Good Competence	10	34.5	34.5	100.0
Total	29	100.0	100.0	

Table 13:- Project Time Management

According to Table 14, in acknowledging knowledge and competence in understanding and application of the Management Knowledge Areas within their organizations in order to achieve Project Success, most of the respondents 34.5% indicated Good Competence vis a vis **Project Cost management**. (Mode=4, N=10, 34.5.%)

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Sufficient Competence	3	10.3	10.3	10.3
Neutral	7	24.1	24.1	34.5
Good Competence	10	34.5	34.5	69.0
Very Good Competence	9	31.0	31.0	100.0
Total	29	100.0	100.0	

Table 14:- Project Cost Management

As presented in Table 15, in acknowledging knowledge and competence in understanding and application of the Management Knowledge Areas within their organizations in order to achieve Project Success, most of the respondents 41.4% indicated Good Competence vis a vis **Project Quality management**. (Mode=4, N=12, 41.4%)

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Insufficient Competence	2	6.9	6.9	6.9
Sufficient Competence	2	6.9	6.9	13.8
Neutral	8	27.6	27.6	41.4
Good Competence	12	41.4	41.4	82.8
Very Good Competence	5	17.2	17.2	100.0
Total	29	100.0	100.0	

Table 15:- Project Quality Management

As shown in Table 16, in acknowledging knowledge and competence in understanding and application of the Management Knowledge Areas within their organizations in order to achieve Project Success, most of the respondents 41.4% indicated Good Competence vis a vis **Project Human Resource Management**. (Mode=4, N=12,41.4.%)

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Sufficient Competence	5	17.2	17.2	17.2
Neutral	5	17.2	17.2	34.5
Good Competence	12	41.4	41.4	75.9
Very Good Competence	7	24.1	24.1	100.0
Total	29	100.0	100.0	

Table 16:- Project Human Resource Management

As indicated in Table 17, in acknowledging knowledge and competence in understanding and application of the Management Knowledge Areas within their organizations in order to achieve Project Success, most of the respondents 31.0% indicated Good Competence vis a vis **Project Communication Management**. (Mode=4, N=09, 31.0%)

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Insufficient Competence	0	0	0	0
Sufficient Competence	7	24.1	24.1	24.1
Neutral	8	27.6	27.6	51.7
Good Competence	9	31.0	31.0	82.8
Very Good Competence	5	17.2	17.2	100.0
Total	29	100.0	100.0	

Table 17:- Project Communication Management

Table 18 shows that, in acknowledging knowledge and competence in understanding and application of the Management Knowledge Areas within their organizations in order to achieve Project Success, most of the respondents 34.5% indicated Good Competence vis a vis **Project Risk management**. (Mode=4, N=10, 34.5%)

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Insufficient Competence	1	3.4	3.4	3.4
Sufficient Competence	5	17.2	17.2	20.7
Neutral	6	20.7	20.7	41.4
Good Competence	10	34.5	34.5	75.9
Very Good Competence	7	24.1	24.1	100.0
Total	29	100.0	100.0	

Table 18:- Project Risk Management

Table 19 indicates that, in acknowledging knowledge and competence in understanding and application of the Management Knowledge Areas within their organizations in order to achieve Project Success, most of the respondents 34.5% indicated Good Competence vis a vis **Project procurement management**. (Mode=4, N=10, 34.5%)

	Frequency	Percent	Valid Percent	Cumulative Percent
Opinion				
Insufficient Competence	1	3.4	3.4	3.4
Sufficient Competence	4	13.8	13.8	17.2
Neutral	7	24.1	24.1	41.4
Good Competence	10	34.5	34.5	75.9
Very Good Competence	7	24.1	24.1	100.0
Total	29	100.0	100.0	

Table 19:- Project Procurement Management

Table 20 presents that, in acknowledging knowledge and competence in understanding and application of the Management Knowledge Areas within their organizations in order to achieve Project Success, most of the respondents 34.5% indicated Good Competence vis a vis **Project Stakeholder Management**. (Mode=4, N=10, 34.5%)

Opinion	Frequency	Percent	Valid Percent	Cumulative Percent
Insufficient Competence	1	3.4	3.4	3.4
Sufficient Competence	4	13.8	13.8	17.2
Neutral	7	24.1	24.1	41.4
Good Competence	10	34.5	34.5	75.9
Very Good Competence	7	24.1	24.1	100.0
Total	29	100.0	100.0	

Table 20:- Project Stakeholder Management

From the opinions gathered from the survey respondents all the respondents acknowledged that they had good competence in the understanding and application of the Management Knowledge Areas within their organizations.

## > Section C

How are project management knowledge areas applied in the communities where projects are implemented?

The following Tables presents opinions of respondents with regards to project management knowledge areas applied in the communities where projects are implemented. Table 21 shows that, in acknowledging the application of Project Management Knowledge Areas in the communities where projects are implemented in order to achieve Project Success, 55.2% indicated divided opinion on Good Competence vis a vis **Project Integration Management**. (Mode=4, N=16, 55.2%)

	Frequency	Percent	Valid Percent	Cumulative Percent
Likert Scale				
Strongly Disagree	1	3.4	3.4	3.4
Disagree	4	13.8	13.8	17.2
Neutral	8	27.6	27.6	44.8
Agree	8	27.6	27.6	72.4
Strongly Agree	7	24.1	24.1	96.6
No Response	1	3.4	3.4	100.0
Total	29	100.0	100.0	

Table 21:- Project Integration Management

In acknowledging the application of Project Management Knowledge Areas in the communities where projects are implemented in order to achieve Project Success, most of the respondents, 48.3% indicated agreement vis a vis **Project Scope Management**. This information is presented in Table 22. (Mode4, N=14, 48.3%)

	Frequency	Percent	Valid Percent	Cumulative Percent
Likert Scale				
Strongly Disagree	2	6.9	6.9	6.9
Disagree	7	24.1	24.1	31.0
Neutral	2	6.9	6.9	37.9
Agree	14	48.3	48.3	86.2
Strongly Agree	3	10.3	10.3	96.6
No response	1	3.4	3.4	100.0
Total	29	100.0	100.0	

Table 22:- Project Scope Management

In acknowledging the application of Project Management Knowledge Areas in the communities where projects are implemented in order to achieve Project Success, most of the respondents 27.6% indicated strong agreement vis a vis **Project Time Management**. This information is indicated in Table 23. (Mode=4, N=8, 27.6%)

	Frequency	Percent	Valid Percent	Cumulative Percent
Likert Scale				
Strongly Disagree	1	3.4	3.4	3.4
Disagre	6	20.7	20.7	24.1
Neutral	6	20.7	20.7	44.8
Agree	7	24.1	24.1	69.0
Strongly Agree	8	27.6	27.6	96.6
No response	1	3.4	3.4	100.0
Total	29	100.0	100.0	

Table 23:- Project Time Management

In acknowledging the application of Project Management Knowledge Areas in the communities where projects are implemented in order to achieve Project Success, most of the respondents 37.9% indicated strong agreement vis a vis **Project Cost Management** as presented in Table 24. (Mode=4, N=11, 37.9%)

	Frequency	Percent	Valid Percent	Cumulative Percent
Likert Scale				
Strongly Disagree	3	10.3	10.3	10.3
Disagree	6	20.7	20.7	31.0
Neutral	5	17.2	17.2	48.3
Agree	3	10.3	10.3	58.6
Strongly Agree	11	37.9	37.9	96.6
No response	1	3.4	3.4	100.0
Total	29	100.0	100.0	

Table 24:- Project Cost Management

In acknowledging the application of Project Management Knowledge Areas in the communities where projects are implemented in order to achieve Project Success, most of the respondents 34.5% indicated agreement vis a vis **Project Quality Management** as shown in Table 25. (Mode=4, N=10, 34.5%)

	Frequency	Percent	Valid Percent	Cumulative Percent
Likert Scale				
Strongly Disagree	2	6.9	6.9	6.9
Disagree	4	13.8	13.8	20.7
Neutral	5	17.2	17.2	37.9
Agree	10	34.5	34.5	72.4
Strongly Agree	7	24.1	24.1	96.6
No Response	1	3.4	3.4	100.0
Total	29	100.0	100.0	

Table 25:- Project Quality Management

In acknowledging the application of Project Management Knowledge Areas in the communities where projects are implemented in order to achieve Project Success, most of the respondents 41.4% indicated agreement vis a vis **Project Quality Management** as indicated in Table 26. (Mode=4, N=12, 41.4%)

	Frequency	Percent	Valid Percent	Cumulative Percent
Likert Scale				
Strongly Disagree	2	6.9	6.9	6.9
Disagree	5	17.2	17.2	24.1
Neutral	3	10.3	10.3	34.5
Agree	12	41.4	41.4	75.9
Strongly Agree	6	20.7	20.7	96.6
N/A	1	3.4	3.4	100.0
Total	29	100.0	100.0	

Table 26:- Project Human Resource Management

According to Table 27, in acknowledging the application of Project Management Knowledge Areas in the communities where projects are implemented in order to achieve Project Success, most of the respondents 41.4% indicated agreement vis a vis **Project Communication Resource Management**. (Mode=4, N=12, 41.4%)

	Frequency	Percent	Valid Percent	Cumulative Percent
Likert Scale				
Strongly Disagree	3	10.3	10.3	10.3
Disagree	4	13.8	13.8	24.1
Neutral	4	13.8	13.8	37.9
Agree	12	41.4	41.4	79.3
Strongly Agree	5	17.2	17.2	96.6
No response	1	3.4	3.4	100.0
Total	29	100.0	100.0	

Table 27:- Project Communication Management

According to Table 28, in acknowledging the application of Project Management Knowledge Areas in the communities where projects are implemented in order to achieve Project Success, most of the respondents 31.0% were undecided vis a vis **Project Procurement Management**, (Mode=4, N=9, 31.0%)

	Frequency	Percent	Valid Percent	Cumulative Percent
Likert Scale				
Disagree	6	20.7	20.7	20.7
Neutral	9	31.0	31.0	51.7
Agree	6	20.7	20.7	72.4
Strongly Agree	7	24.1	24.1	96.6
N/A	1	3.4	3.4	100.0
Total	29	100.0	100.0	

Table 28:- Project Procurement Management

According to Table 29, in acknowledging the application of Project Management Knowledge Areas in the communities where projects are implemented in order to achieve Project Success, most of the respondents 34.5% were undecided strong agreement vis a vis **Project Risk Management**, (Mode=4, N=10, 34.5%

	Frequency	Percent	Valid Percent	Cumulative Percent
Lkert Scale				
Strongly Disagree	2	6.9	6.9	6.9
Disagree	4	13.8	13.8	20.7
Neutral	10	34.5	34.5	55.2
Agree	6	20.7	20.7	75.9
Strongly Agree	6	20.7	20.7	96.6
No Response	1	3.4	3.4	100.0
Total	29	100.0	100.0	

Table 29:- Project Risk Management

Table 30 presents that, in acknowledging the application of Project Management Knowledge Areas in the communities where projects are implemented in order to achieve Project Success, most of the respondents 31.0% indicated strong agreement vis a vis **Project Stakeholder Management**, Mode=4, N=9, 31.0%

	Frequency	Percent	Valid Percent	Cumulative Percent
Likert Scale				
Strongly Disagree	1	3.4	3.4	3.4
Disagree	6	20.7	20.7	24.1
Neutral	5	17.2	17.2	41.4
Agree	7	24.1	24.1	65.5
Strongly Agree	9	31.0	31.0	96.6
No response	1	3.4	3.4	100.0
Total	29	100.0	100.0	

Table 30:- Project Stakeholder Management

From the opinions gathered from the respondents most of the respondents indicated agreement with regard to the application of Project Management Knowledge Areas in the communities where projects were implemented in order to achieve Project Success except one Project Management Knowledge Area (**Project Risk Management**) where most respondents indicated to undecided.

## IV. CONCLUSION

Findings revealed that most of the respondents indicated agreement to the application of Project Management Knowledge Areas within the organization, except one Project Management Knowledge Area (Project Time Management) where the majority indicated disagreement. Further, all the respondents acknowledged that they had good competence in the understanding and application of the Management Knowledge Areas within their organizations. Subsequently, most of the respondents indicated agreement with regards to the application of Project Management Knowledge Areas in the communities where projects were implemented in order to achieve Project Success, except one Project Management Knowledge Area (Project Risk Management) where most respondents indicated to be undecided. The study concluded that Project Management Knowledge Areas were effective in achieving project success.

## REFERENCES

- [1]. Abdulla, H., and Al-shimi, M. (2019), The Impact of Project Management Methodologies on Project Success: A Case Study of the Oil and Gas Industry, Journal of Engineering, Project and Production Management, 2019, 9(2),115-125
- [2]. Arafa, E.A. (2015), The Impact of Knowledge Managementon Project Success, Portsmouth: Business School, University of Portsmouth
- [3]. Banda, J. (2019) Developing Strategies for Improving Implementation of Public Sector Construction Projects in Zambia: Lusaka, University of Lusaka
- [4]. Bathallath, S., Smedberg, A., and Kjellin, H (2016) Managing project interdependencies in IT/IS project portfolios: a review of managerial issues, International

- Journal of Information Systems and Project Management, 4 (2016) 67-82
- [5]. Carvalho, M.M., Pata, L.A., and Bido, D. (2015), Project Management and its effects on project success, Cross-country and coross-industry comparisons, International of Project Management, http://dx.doi.org/10.1016/j.ijproman.2015.04.004 (Accessed, 9th February, 2020)
- [6]. Chaves, M., Araújo, C., Teixeira, L., Rosa, D., Júnior, I., and Nogueira, C. (2016) A new approach to managing Lessons Learned in PMBoK process groups: The Ballistic 2.0 Model, International Journal of Information Systems and Project Management, 4 (2016) 27-45.
- [7]. Cheng, J.K., Malik, A.Z., and Sorooshiran, S. (2017), Understanding the Interrelationship between Different Knowledge Areas in PMBOK through the Development of System Dynamics Model, *Journal of the Social Sciences*, 12(3): 473-481, 2017
- [8]. Chilongo, C., and Mbetwa, S. (2017) An Investigation into the factors affecting project performance among contractors in Lusaka District of Zambia, *The International Journal of Multi-Disciplinary Research* ISSN: 3471-7102 Information Communication University
- [9]. Christina, C., and Panagiota, S. (2018), Potentials and Pitfalls of Contract Farming through Agricultural Cooperatives in Greece. *Journal of Economics and* Sustainable Development, Volume 27(2018) http://FAC\_Working\_Paper\_055.pdf (Accessed, 12<sup>th</sup> January, 2020)
- [10]. Dermirkesen, S., and Ozorhon, B. (2017), Measuring Project Management Performance: A Case of Construction Industry, Engineering Management Journal, 29: 4, 258-277, DOI: 10. 1080/10429247. 2017.1380579
- [11]. Dube, L., and Mugwagwa, K.E. (2017), The Impact of Contract Farming on Smallholder Tobacco Farmers' Household. Incomes: A Case Study of Makoni District, Manicaland Province, Zimbabwe, Scholars Journal of Agriculture and Veterinary Sciences. 4(2), 79-85

- [12]. Dumrake, J., Baroudi, B., and Pullen, S. (2015), A study of Project Management Knowledge and Susstainable Outcome in Thailand's reproductive health projects. DOI: http://dx.doi.org/10.5130/opm.v2i1.4274
- [13]. Galatia, D. (2019) A framework for preventing underground drill rig breakdowns: A case of Lubambe Copper Mine: Lusaka, University of Lusaka
- [14]. Guide to the Project Management Body of Knowledge (2013), 5<sup>th</sup> edition: Newtown Square, Pennsylvania 19073-3299 USA, Project Management Institute
- [15]. Huang, Z., Xu, Y., Wang, C., and Wang, J. (2018), one size fits all? Contract farming among broiler producers in China, *Journal of Integrative Agriculture*, 17(2), 473 482
- [16]. International Fund for Agricultural Development (2014), Country Program Evaluation: Document of the Republic of Zambia, October 2014 Report No. 3551-ZM, Independent Office of Evaluation
- [17]. Javel, S., and Liu, S. (2017), Evaluation of Project Management Knowledge Areas Using Grey Incidence Model and AHP, 120-120, 10. 1109/GSIS. 2017. 8077684
- [18]. Kamau, C.G., and Mohamed, H.B. (2015), Efficacy of Monitoring and Evaluation Function in Achieving Project Success in Kenya: A Survey of County Government's Projects, *International Journal of Advances in Management and Economics*, ISSN: 2278-3369: Malaysia, Shah Alam, Faculty of Finance & Administrative Sciences, Almadinah International University
- [19]. Kasongo, R (2015) Strategic Lean Thinking and Value Management philosophies in the Construction and Maintenance of Gravel Roads in Zambia: Lusaka, University of Zambia
- [20]. Liberato, M., Varajão, J., and Martins, P. (2015) CMMI Implementation and Results: The Case of a Software Company, in: Modern Techniques for Successful IT Project Management, IGI Global, 2015
- [21]. Maltitz, G.P., Henley, G., Ogg, M., Samboko, P.C., Gasparatos, A., Read, M., Engelbrecht, F., Ahmed, A. (2018): Institutional arrangements of Out-grower production in Southern Africa, Development Southern Africa, DOI: 10.1080/0376835X.2018.1527215 https://doi.org/10.1080/0376835X.2018.1527215 (Accessed 11<sup>th</sup> January, 2020)
- [22]. Martina, K., and Pavel, M. (2016), Survey on the level of Knowledge and Skills of Project Managers in Regional Development, Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis 64 (4): 1325-1335
- [23]. Mladen, R., and Mariela, S. (2017), Project Management Success Factors, *Procedia Engineering*. 196.601-615.10.1016/j.proeng.2017.08.048.
- [24]. Murphy, T., and Cormican, K. (2016) Onwards holistic goal centered performance management in software development: lessons from a best practice analysis, International Journal of Information Systems and Project Management, 3 (2015) 23-36.

- [25]. Muszynska, K. (2016), Project Communication Management Patterns, Vol. 8 ISSN2300-5963. DOI:10.15439/2016F235
- [26]. Naeem, C., Khanzada, B., Mubashir, T., and Sohail, H. (2018), Impact of Project Planning on Project Success with Mediating Role of Risk Management and Moderating Role of Organizational Culture: Islamabad, Pakistan, *International Journal of Business and Social Science* 9(1) January 2018 Riphah International University
- [27]. Ngomi, C. (2017), Factors Affecting Project Performance Among Local Contractors, *The International Journal of Multi-Disciplinary Research* ISSN: 3471-7102, Information and Communications University
- [28]. Nibyiza, F. (2015), Analysis of Project Scope Change Management as a Tool for Project Success. Jomo Kenyatta University
- [29]. Rabia, S. (2018), Overview Success Criteria and Critical Success Factors in Project Management, *Journal of Industrial Engineering and Management*. 7.10.4172/2169-0316. 1000244
- [30]. Ragasa, C., Lambert, I., and Kufoalor, D. (2018), Limitations of Contract Farming as a Pro-poor Strategy: The Case of Maize Out-grower Schemes in Upper West Ghana. *World Development*, 102, 30-56. February 2018. https://doi.org/10.1016/j.worlddev.2017.09008 (Accessed, 1st January, 2020)
- [31]. Simuyi, N.R. (2017) Project Management Practices and Performance of Agricultural Projects by Community-based Organizations in Bungoma County, Kenya
- [32]. Varajão, J. (2016) Success Management as a Project Management knowledge area, *Procedia Computer Science* 100 (2016) 1095 1102, Conference on ENTERprise Information Systems / International Conference on Project Management / Conference on Health and Social Care Information Systems and Technologies, CENTERIS / ProjMAN / HCist 2016, October 5-7, 2016
- [33]. Zwikael, O., and Meredith, J.R. (2019) Evaluating the Success of a Project and the Performance of its Leaders. IEEE Transactions on Engineering Management, PP. 1 13. 10 1109/TEM. 2019.29255057