

Influence of Managers Resource Mobilization Skills on Completion of Irrigation Projects in Baringo County Kenya

Winney Chelangat¹, David Gichuhi²

¹School of entrepreneurship, Procurement and management, Jomo Kenyatta University of Agriculture and Technology

² School of entrepreneurship, Procurement and management, Jomo Kenyatta University of Agriculture and Technology

Abstract: In Kenya leadership has been a challenge in establishment and completion of irrigation projects. This study therefore examined the influence of project managers' resource mobilization skills on completion of national irrigation board (NIB) projects. The study was guided by theory of constraints. Descriptive research design with a census approach was used on project contractors in 57 irrigation projects in Baringo County. Questionnaires were used for data collection. Data was analyzed using Statistical Package for Social Sciences (SPSS). Descriptive statistics (percentages, mean and standard deviation) and inferential statistics (regression and correlation analysis) were utilized. The study established that leaders' resource mobilization skills, had significant relationship with completion of irrigation projects. Regression analysis demonstrated that resource mobilization skills significantly influenced completion of irrigation projects. The study concluded that resource mobilization skills have a significant influence on completion of irrigation projects. Therefore, the study recommended that the NIB establish policies to guide the choice of project managers in irrigation projects. This will ensure that leaders with resource mobilization skills are chosen to undertake any irrigation project thus enhancing project completion.

Keywords: Project, Irrigation, Resource Mobilization, Project Completion, Skills

I. Introduction

Project management practices attempt completion of the project as intended; getting it done most efficiently by minimizing cost and achieving external goals related to customer needs [1]. Goals appear straightforward and achievable, however, projects continue to run late, exceed their budgets or fail to meet project objectives. Modern project management was introduced during the Manhattan project in the early 50's, but certainly, projects have been realized before that time. The experience of the project manager directly influences the success of projects [1].

Projects are temporary endeavours which lead to the creation of unique services, products, or results [2]. The irrigation projects refers to projects that seek to apply controlled amounts of water to plants at needed intervals [3]. The irrigation projects play critical role to the social economic development of the country. In this context, [3] irrigation projects are associated with food security of residents, improvement of the economic lives of the farmers, and improvement of rural lives through technical as well as financial resources transfer to the irrigating communities.

Various authors have emphasised that the complex demanding and the dynamic requirements of the complex projects call for project managers with high capabilities who can manage the construction process from the early stage to the final stage of the construction project successfully [4][5]. Complex projects require a project manager who holds critical specifications that differ from the specifications of the project manager of simple projects [6]. The complexity of complex projects requires the manager to be able to develop new initiatives and new ideas that are not consumed in order to ensure the success of the project. On the other hand, Pollack and Remington [7] stressed that the successful complex project manager must be able to transform the complex areas of the project into easy elements that are easily understood and realized by employees. This means that the project managers must have the necessary management skills that will help them succeed in the project.

Empirical data [8] shows project management skill as having the most significant impact on achieving project success which is equated to achieving project objectives. Cooke-Davies, [9] consistently shows well-trained teams deliver more benefit to project management than undertrained teams. Well trained and knowledgeable project managers and staff

aggressively seek ways to control cost and to effectively reduce risks to projects by carefully selecting the most appropriate technologies, hiring the most affordable and experienced consultants, and using sophisticated management practices to ensure functional success. A project's level of embedded skill will affect project outcome regardless of project complexity. The likelihood of project success is proportional to the skill level of the team working on it. Stated bluntly, the risk of a project failing to meet its objectives rises when the project team does not have the skills to do the job [10].

The irrigation projects enhance agricultural productivity from reduction of overreliance on the rain fed agriculture [11]. The irrigation projects also enable farming in areas which would otherwise be considered unsuitable for farming due to low or inadequate rainfall capacities [3]. The expanding world population has also put pressure on need for higher agricultural productivity in continuous manner rather than seasonal based farming that is rain fed [12]. Despite their importance to the social economic development of the country, the irrigation projects still face diverse challenges in their completion [13].

Kenya has an increased need for the development, completion and use of irrigation projects to cater for its expanding population and an undependable rainfall pattern [11]. In this context, overreliance on rain fed agriculture exposes the country to food security risks characterized by periodical food shortage across the country [11]. Muriithi [14] notes that the irrigation projects are critical in Kenya to facilitate a sustainable food production capacity and boost food security aspects.

Kenya has an estimated irrigation potential of 1.3 million ha but only about 765 575ha can be developed with the available water resources (GoK, 2013). The estimated irrigation area in Kenya varies depending on the year and the source ranging from 103 203 ha to 161 840 ha. The National Water Master Plan 2030 (NWMP 2030) carried a survey in 2011 on irrigated area in each County. The study showed that the total irrigated area was 141 900 ha (GoK, 2013a). Now, the National Irrigation Board affirms that the current irrigated area is 161 840 ha (NIB, 2014).

Lack of sufficient operation and maintenance budget has led to the deterioration of irrigation and drainage infrastructure in most of the public and small holder irrigation schemes resulting underperformance and sometimes closure. Most national irrigation schemes were nonfunctional between 2000 and 2002 due to lack of funds for Operation and Maintenance (O&M) and when the schemes were revived by the government in 2003, O&M fees were introduced and Water User Associations were initiated in an effort to make them sustainable. Since then the fees have not been revised leading to widening deficit due to increase in inputs prices (FAO, 2015).

II. Statement of the Problem

A report by Food and Agriculture Organization (FAO, 2015), Kenya's potential irrigable land amounts to 353 000 hectares. The sector, however, is growing and the total irrigated area has reached about 165 900 hectares, about 47 percent of the total potential. In 2014, the Government of Kenya (GoK) launched its National Water Master Plan 2030, with targets to increase the irrigated area up to approximately 970 000 hectares in 2030. This plan raises the calculated irrigation potential of the country by 2.75 times (FAO 2015). The report further noted that the current total irrigated area falls short of the target for 2010 of 197 000 ha set by the National Water Master Plan 1992 (NWMP 1992). Hence the 2010 target has not been met until recently. This raises doubts on whether the target for vision 2030 will be achieved. Baringo County and Kenya in general has an increasing need for irrigation projects due to prevalence of undependable rainfall pattern. The county faces harsh climatic conditions, which has made the area to be susceptible to draughts and food insecurity challenges. The county especially Baringo North, Tiaty, Baringo South, Mogotio, Baringo Central and Eldama-Ravine have in the past received food aid/relief from the government and well-wishers. However, initiated irrigation projects in the area continue to face diverse completion challenges [11]. While estimating that by the year 2015 Kenya had an approximately 107,000 small scale irrigation projects, Mboi [15] noted that a majority (over 70%) of those projects had completion aspects challenges. These challenges included low management capacity by farmers, poor irrigation projects design, and poor maintenance levels of the projects amongst other challenges. Miruri and Wanjohi [11] further noted that diverse irrigation projects in Kenya face diverse challenges. In this context, they noted that despite the country spending over eight billion annually in development of irrigation projects, these projects are faced by diverse challenges. These included performance below capacity, donor exit and poor maintenance levels. The projects that have collapsed after donor exit include Bura irrigation scheme, Kibwezi irrigation scheme and Ciambaraga irrigation schemes [11]. In light of this, this study sought to examine the influence of project manager's leadership skills on on completion of irrigation projects by National Irrigation Board in Baringo County Kenya.

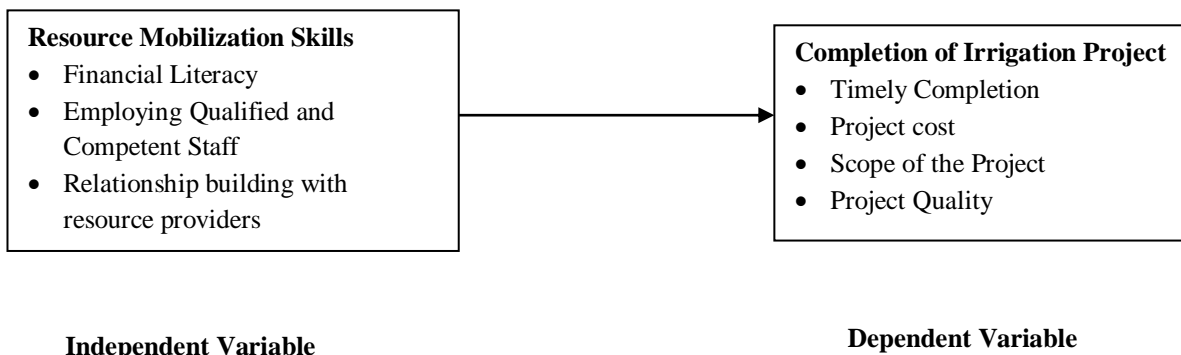
1. Purpose of the Study

The study sought to examine the influence of resource mobilization skills on completion of national irrigation board’s projects in Baringo county Kenya.

2. Hypothesis of the Study

H₀: Resource mobilization skills do not significantly influence completion of NIBs’ project in Baringo County Kenya.

3. Conceptual Framework



III. Theory of Constraints (TOC)

Goldratt [16] developed the Theory of Constraints which is a project management philosophy that states that the strength of any chain, either a process or a system, is only as good as its weakest link. It assists organizations in achieving their goals by providing a mechanism to gain better control of their initiatives. TOC is a systemic way to identify constraints that hinder system’s success and to effect the changes to remove them. TOC consists of separate, but interrelated concepts such as performance measurement processes, logical thinking processes, and logistics. The logical thinking process of TOC gives us a series of steps that combine cause-effect, experience, and intuition to gain knowledge. The theory, in this case, addresses dependent variable, project performance. For any project to perform there is a need to minimize the constraints that can otherwise reduce the quality and quantity of the product and services delivered. These constraints may include poor management practices such as cost overruns caused by poor budgeting and corruption. The theory points out the need for project management to identify project constraints that can limit the performance of the project and tries to give direct approaches on how to solve the constraints. This study augur its discussion on this theory since it checks on issues that can limit project performance.

IV. Resource Mobilization Skills

In order to make a good budget for a project, it is important that the project manager is able to identify all the requirements in the project so that the scope of the project is clearly defined. Failure to identify some items in the project can have negative implications on the project since their acquisition price may be increased as the time draws close as compared to that of those which were adequately researched before purchase or hire. Every project manager wants to continuously improve on the performance of projects undertaken. Project managers need to look for adequate finances in order to be able to implement projects successfully. Project managers also need to employ qualified and competent staff to operate the plant machines and carry out other activities related to completion of the projects [17].

Some of the key elements that strengthen resource mobilization efforts skills include; having a clear sense and commitment to the organization’s vision and mission, effective management and leadership that ensures among others that there is accountability and transparency in the organization, solid reputation, credibility and positive image, the ability to attract, create and sustain new resources while discharging services to their clients/ community [18]. According to Chitere [19] resource mobilization strategies does not only mean use of money but it extensiveness denotes the process that achieves the mission of the organization through the mobilization of knowledge in human, use of skills, equipment and services. It also involves seeking new sources of resource mobilization, right and maximum use of the available resources.

Project resource mobilization involves identifying financial, human, physical and technical resources and organizing them in a way that leads to successful implementation of a project [20]. Financial resources refer to funds that are required by project contractors to buy the equipment and machinery needed in undertaking the road projects and meet other expenses related to the project such as salaries and wages for the workers and cost of fuelling the vehicles [21].

Project managers therefore need to look for adequate finances in order to be able to implement road infrastructure projects successfully. Project managers also need to employ qualified and competent staff to operate the plant machines and carry out other activities related to road infrastructure projects. Technological resources refer to modern tools and techniques used in the implementation and management of projects. Human resources involves recruitment of technical staff with competency and experience that will enable the implement infrastructure projects effectively and efficiently [17].

Financial literacy prepares financial managers and projects managers to handle financial transactions, through strategies that mitigate risk such as accumulating savings, diversifying financial sources and assets, purchasing insurance and inviting relevant private investors within the required framework. Financial literacy facilitates the decision making processes such as payment of bills on time for both the supplying companies like the contractors, proper debt management which improves the credit worthiness of the completion of projects to support livelihoods, economic growth, sound financial systems, and poverty reduction through proper projects targets. It also provides greater control of one's financial future, more effective use of financial products and services, and reduced vulnerability to overzealous retailers or fraudulent schemes [22].

On resource mobilization skills, the project manager should be able to identify a range of financial and non-financial resources for the project [23]. Argote [24] in his study on the relationship between resource mobilization and leadership styles among Community Based Organizations (CBOs) in Kitui District emphasized that resource mobilization is meaningless if the CBO leadership has not thought of making the organization sustainable. This is because resource mobilization does only mean to receive resources for running the donor's program, it is a self-respectful step to develop the organization, to provide continuous service to the community and become self-reliant.

V. Completion of Irrigation Project

The concept of completion indicates the successful implementation of irrigation projects in due time. This means that the project team delivers the irrigation project time before an elapse of the expected completion date. Time is one of the major constraints in project management alongside other critical factors as costs (budget), scope and quality. Time is generally acknowledged as the most common, costly, complex and risky problem encountered in construction projects. Completion of a construction project is frequently seen as a major criterion of project success by clients, contractors and consultants [25].

Completing projects on time is an indicator of efficiency, but the construction process is subject to many variables and unpredictable factors, which result from many sources. These sources include the performance of parties, resources availability, environmental conditions, involvement of other parties, and contractual relations. However, it rarely happens that a project is completed within the specified time [26].

Leadership is a vital factor of effective management but its function and direct influence on project success or failure in term of internal and external. The swiftly rising change of manager's leadership characteristics and behaviours influence the success or failure in organizational change. The essential leadership and managerial knowledge, skills, competencies and characteristics ensure successful completion of projects through right decisions at right time and by employing right people at right places [27].

Leadership plays a significant role in project management, which entails promoting objectives of a project, empowering and inspiring project personnel, raising moral of the project team, supporting effective teamwork and encouraging positive relationships among others (Pandya, 2014). It is the responsibility of project managers to influence project team to take necessary actions towards achievement of objectives and goals of a project, which translates, to successful project implementation. Therefore, effective leadership must take into account three main components of a project, which include time, cost and scope with an intention of meeting them Leadership plays a significant role in project management, which entails promoting objectives of a project, empowering and inspiring project personnel, raising moral of the project team, supporting effective teamwork and encouraging positive relationships among others (Pandya, 2014). It is the responsibility of project managers to influence project team to take necessary actions towards achievement of objectives and goals of a project, which translates, to successful project implementation. Therefore, effective leadership must take into account three main components of a project, which include time, cost and scope with an intention of meeting them.

Leadership plays a significant role in project management, which entails promoting objectives of a project, empowering and inspiring project personnel, raising moral of the project team, supporting effective teamwork and encouraging

positive relationships among others (Pandya, 2014). It is the responsibility of project managers to influence project team to take necessary actions towards achievement of objectives and goals of a project, which translates, to successful project implementation. Therefore, effective leadership must take into account three main components of a project, which include time, cost and scope with an intention of meeting them.

Good management of irrigation schemes involving all the stakeholders including members is becoming increasingly recognized as an essential mean to achieve successful irrigated agriculture. It is recognized that poor performance is not only a consequence of technical performance in the design and operation of irrigation systems (although it is sometimes an important factor), but many of the problems are based on weaknesses in the organization and management of the scheme when all the stakeholders especially the community recipients are not involved [28].

In their study, Choge and Muturi [29] associate the completion of infrastructural projects on the experience of the contractor. Contractors are selected on the basis of price, experience in undertaking particular types of construction project and their reputation or track record in producing high quality work within budget and on time. In most cases there is a trade-off between price, experience and track record but the desire to accept the lowest tender does not always lead to a project that is completed within time. The inherent contractors experience during preparation, planning, authorization and evaluation procedures for large infrastructure projects creates obstacles to the implementation of such projects.

In their study of performance of build-operate-transfer projects, Lekan *et.al.*, [30] established in their work that there is linear relationship between effective project supervision and completing projects on scheduled time. The study found that Relationship between project supervision versus project completion time was analyzed on one hand and supply of material versus scheduled project time on the other it was validated through results that they all linearly correlated. Ameh and Osegbo [31] also found that the incompetency of the supervision staff has a negative effect on completion of the project. This means that there is a need for qualified professionals to supervise irrigation projects. Lekan, Opeyemi and Olayinka, [30] similarly argue that the availability of qualified supervision professionals has a positive effect on completion of projects.

VI. Research Methodology

9.1 Research Design

The study adopted a descriptive research design because the study sought to respond to the problem by answering the why, how and when questions about the study. Mugenda and Mugenda [32] described descriptive research design as a systematic, empirical inquiry into which the researcher does not have a direct control of independent variable as their manifestation has already occurred or because they inherently cannot be manipulated.

In this study, the target population comprised of the project contractors tasked with the implementation of irrigation projects in Baringo county Kenya. There are 57 irrigation projects (National Irrigation Board (NIB), 2020) in the county and therefore the study targeted project contractors in each of the project. As such the study respondents were the 57 project contractors drawn from the 57 projects. Based on the small number of the target population the study employed a census, where all project contractors from the 57 projects were taken as the study respondents. A structured questionnaire was used to collect data from the respondents.

VII. Findings and Discussion

10.1 Response Rate

A total of 57 questionnaires were distributed to the respondents for the purposes of data collection. Nine questionnaires were not returned. As such 48 questionnaires were returned which were completely filled. This represented a response rate of 84.2% which was characterized as very good [33].

10.2 Resource Mobilization Skills Descriptive Statistics

The study set out to determine the perception of the respondents regarding issues in relation to resource mobilization skills. The percentages, means and standard deviation were computed and the findings presented in Table 1

Table 1: Descriptive Statistics on Resource Mobilization Skills

	SA	A (%)	U (%)	D (%)	SD	Mean	Std.
	(%)				(%)		Dev

Our project teams have financial literate managers for financial planning	29.2	54.2	2.1	4.2	10.4	3.88	1.196
The management in our project is able to plan for the budget needed for the completion of the project	22.9	27.1	27.1	8.3	14.6	3.35	1.329
Our manager is key in mobilizing adequate finances to help in implementing successful irrigation projects.	25.0	41.7	18.8	8.3	6.3	3.71	1.129
The management has been able to mobilize competent staffs for our irrigation project	2.1	12.5	16.7	39.6	29.2	2.19	1.065
The management in our project is able to identify potential resource providers for the project	2.1	10.4	6.3	39.6	41.7	1.92	1.048
The management team in our project is able to maintain a cordial relationship with the resources providers	8.3	41.7	8.3	27.1	14.6	3.02	1.280
Our manager has the financial acumen that helps him/her handle all the financial transactions involved in a project	18.8	62.5	2.1	8.3	8.3	3.75	1.120
Our manager is able to manage all the available resources by allocating them where needed	12.5	50.0	2.1	25.0	10.4	3.29	1.271
Our resources are effectively managed and accountability and transparency is ensured on every coin spent	18.8	37.5	14.6	18.8	10.4	3.35	1.280
Valid N (listwise)	48						

Descriptive results indicated that respondents agreed that their project teams have financial literate managers for financial planning. 54.2% of the respondents agreed while 29.2% of them strongly agreed. This statement recorded a mean of 3.88 and a standard deviation of 1.196. Further, respondents agreed that the management in their project is able to plan for the budget needed for the completion of the project. 50.0% of the respondents strongly and/or agreed registering a mean of 3.35 and a standard deviation of 1.329. On the statement that their manager is key in mobilizing adequate finances to help in implementing successful irrigation projects, 41.7% of the respondents agreed while 25.0% of them strongly agreed with a mean of 3.71 and a standard deviation of 1.129. On the other hand, respondents disagreed that the management has been able to mobilize competent staffs for their irrigation project. 39.6% and 29.2% of the respondents disagreed and strongly disagreed respectively. This had a mean of 2.19 and a standard deviation of 1.065. They also disagreed (M=1.92, SD=1.048) that the management in their project is able to identify potential resource providers for the project where 41.7% of the respondents strongly disagreed while 39.6% of them disagreed with the statement. On the contrary respondents were undecided on whether the management team in their project is able to maintain a cordial relationship with the resources providers. 40.0% of the respondents agreed, 18.3% of them were undecided while 41.7% of the respondents disagreed. This has a mean of 3.02 and a standard deviation of 1.280. 62.5% of the respondents agreed while 18.8% of the respondents strongly agreed that their manager has the financial acumen that helps him/her handle all the financial transactions involved in a project. This aspect had a mean of 3.75 and a standard deviation of 1.120. In addition, 62.5% of the respondents strongly and/or agreed that their manager is able to manage all the available resources by allocating them where needed. This assertion had a mean of 3.29 and a standard deviation of 1.271. Finally, respondents agreed that their resources are effectively managed and accountability and transparency is ensured on every coin spent where 37.5% and 18.8% of the respondents agreed and strongly agreed respectively. This statement had a mean of 3.35 and a standard deviation of 1.280.

10.3 Completion of irrigation project Descriptive Statistics

Finally, the percentages, means and standard deviations on completion of irrigation projects were computed and results were as shown in the table below.

Table 2: Descriptive Statistics on Completion of irrigation project

	SA (%)	A (%)	U (%)	D (%)	SD (%)	Mean	Std. Dev
The scope of the project always informs the project cost	12.5	31.3	20.8	14.6	20.8	3.00	1.353

The planning of the project is always aligned with the project cost	31.3	58.3	6.3	2.1	2.1	4.15	.799
Over 80% of our projects are completed in time	0	41.7	45.8	8.3	4.2	3.25	.786
Our supervisory team ensures projects are completed in time	2.1	22.9	50.0	20.8	4.2	2.98	.838
We constantly monitor our projects to ensure maintenance of quality specification	18.8	56.3	20.8	2.1	2.1	3.88	.815
Our projects are usually of high quality and are focused on long term sustenance	31.3	47.9	16.7	2.1	2.1	4.04	.874
The project completion is kept within the budget cost	0	52.1	39.6	6.3	2.1	3.42	.710
Valid N (listwise)	48						

Results from the descriptive established that respondents were not sure on whether the scope of the project always informs the project cost. 43.8% of the respondents agreed, 20.8% of them were undecided while 35.4% of respondents disagreed. This assertion had a mean of 3.00 and a standard deviation of 1.353. Consequently, respondents agreed that the planning of the project is always aligned with the project cost. 58.3% of the respondents agreed while 31.3% of them strongly agreed recording a mean of 4.15 and a standard deviation of 0.799. However, 45.8% of the respondents were also not sure whether over 80% of their projects are completed in time. This had a mean of 3.25 and a standard deviation of 0.786. Also they were undecided whether their supervisory team ensures projects are completed in time. 50.0% of the respondents were undecided recording a mean of 2.98 and a standard deviation of 0.838. Alternatively, respondents agreed that they constantly monitor their projects to ensure maintenance of quality specification. 56.3% of the respondents agreed while 18.8% of them strongly agreed registering a mean of 3.88 and a standard deviation of 0.815. Majority of the respondents comprising of 79.2% of the respondents strongly and/or agreed that their projects are usually of high quality and are focused on long term sustenance. This had a mean of 4.04 and a standard deviation of 0.874. They also agreed that the project completion is kept within the budget cost where 52.1% of the respondents agreed having a mean of 3.42 and a standard deviation of 0.710.

10.4 Correlation Analysis

The study examined the relationship between Resource Mobilization and the completion of irrigation projects in Baringo County. Pearson product moment correlation coefficient was used in this regard. The results from the analysis were as presented in Table below.

Table 3: Relationship between Resource Mobilization and Growth of Completion of Irrigation Projects

		Resource Mobilization Skills
Completion of Irrigation Projects	Pearson Correlation	.777**
	Sig. (2-tailed)	.000
	N	48

** Correlation is significant at the 0.01 level (2-tailed).

Findings indicated that there existed a strong positive significant ($r=.777$, $p=.000$) relationship between resource mobilization skills and completion of irrigation projects. This means that resource mobilization skills are a key determinant of completion of irrigation project. Thus, resource mobilization skills are significantly correlated with completion of irrigation projects. Argote [24] in his study on the relationship between resource mobilization and leadership styles among Community Based Organizations (CBOs) in Kitui District emphasized that resource mobilization is meaningless if the CBO leadership has not thought of making the organization sustainable. This is because resource mobilization does only mean to receive resources for running the donor's program, it is a self – respectful step to develop the organization, to provide continuous service to the community and become self-reliant. On resource mobilization skills, the project manager should be able to identify a range of financial and non-financial resources for the project [23].

10.5 Hypothesis Testing

Simple linear regression analysis was generated to help in the testing of the study hypothesis at 0.05 level of significance. The null hypothesis was to be rejected if the p-value was less than the level of significance and failed to be rejected when p-value was greater than 0.05.

The first hypothesis H_0 indicated that resource mobilization skills do not significantly influence completion of NIBs' project in Baringo County Kenya.

Table: Model Summary of Resource Mobilization Skills

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.777 ^a	.604	.595	.32206

a. Predictors: (Constant), Resource Mobilization Skills

The model gave an R squared value of 0.604 for resource mobilization skills. It was observed that resource mobilization skills could account for up to 60.4% of the total variation in completion of national irrigation project in Baringo County. This demonstrated that resource mobilization skills had a significant contribution towards completion of irrigation projects. Results from the ANOVA were as shown table below

Table: ANOVA^a on Resource Mobilization Skills and Completion of Irrigation Projects

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	7.268	1	7.268	70.067	.000 ^b
1	Residual	4.771	46	.104		
	Total	12.039	47			

a. Dependent Variable: Completion of Irrigation Project

b. Predictors: (Constant), Resource Mobilization Skills

Results from ANOVA indicated that an F-value of 70.067 with a p-value of 0.000 which was significant at $p < .05$ level of significance was yielded. The study established that resource mobilization skills significantly influenced completion of NIBs' project. As such, the null hypothesis H_0 that resource mobilization skills do not significantly influence completion of NIBs' project in Baringo County Kenya was rejected. The study therefore observed that resource mobilization skills have a significant influence on completion of irrigation projects in Baringo County Kenya.

VIII. Conclusions and Recommendations

The study concluded that resource mobilization skills had a significant influence on completion of irrigation project. Findings indicated that resource mobilization skills and completion of irrigation projects have a significant relationship with each other. As such, resource mobilization skills for project managers would play a role in enhancing the completion of irrigation project. Further, resource mobilization skills were confirmed to have a significant influence on completion of irrigation projects in Baringo County. Thus the study concluded that possession of resource mobilization skills by project managers would lead to enhanced completion rates of irrigation projects within Baringo County.

The study came up with a few recommendations based on the study findings from the analysis of data. The study recommended that the National irrigation board (NIB) should come up with policies that will guide in the choice of project managers in irrigation projects in Baringo. The policies derived should set the thresholds to be met in terms of leadership skills projects managers should have for them to qualify for a project contract. This would help the board to always hire projects managers with resource mobilization skills necessary for completion of irrigation projects.

REFERENCES

- [1] Al-Hajj, A. (2018). The Impact of Project Management Implementation on the Successful Completion of Projects in Construction. *International Journal of Innovation, Management and Technology*, 9(1); 21-27
- [2] Musembi, P. Cowburn, B. & Sluka, R. (2017). *Biodiversity and Conservation of Elasmobranchs in Watamu Marine National Park and Reserve*. A Rocha Kenya.
- [3] Majoro, F., Mukamwambali, C., Amour, J. & Shumbusho, U. (2016). Environmental Impacts Investigation of Irrigation Projects: Case Study of Kanyonyomba Rice Perimeter in Rwanda. *Journal of Water Resource and Protection*, 8, 687-696.

- [4] Aimable, S. (2015). *Effects of Risk Management Methods on Project Performance in Rwandan Construction Industry: A Case Study of the Multi-Storey Buildings Construction Project of RSSB* Master Theses, Jomo Kenyatta University of Agriculture and Technology.
- [5] Williams, T. (2013). *Managing and Modelling Complex Projects*. Netherlands: Springer.
- [6] Mouchi, G., Rotimi J. & Ramachandra, T. (2011). The skill sets required for managing complex construction projects. *Business Education & Administration* 3, 89-100
- [7] Pollack, J. & Remington, K. (2012). *Tools for Complex Projects*. Aldershot: Gower Publishing Ltd.
- [8] Chamoun, Y., (2011). *Professional Project Management, The Guide, (1st Ed.)*. McGraw Hill, NL Monterrey.
- [9] Cooke-Davies, T. (2010). The “real” success factors in projects. *International Journal of Project Management*, 6(3), 164 – 170
- [10] Nyaga, K. (2014). *Role of Project Management Skills on Performance of Construction Projects: A Case of Selected Construction Firms in Mombasa County, Kenya*. Research Project, University of Nairobi.
- [11] Miruri, K. & Wanjohi, M. (2017). Determinants of Performance of Irrigation Oroyects: Case of Nthawa Irrigation Projects of Mbeere North Sub-County, Embu County, Kenya. *International Academic Journal of Information Sciences and Project Management*, 2(1): 447-463.
- [12] Guldekar, A. & Ranit, A. (2016). *Evaluation of Quality Management in Irrigation Projects*. 5(3), 1574–1580.
- [13] Singh, P., Sharma, R., Hassan, Q. & Ahsan, N. (2013). *Performance Evaluation of Irrigation Projects - A Case Study of Lift Irrigation Scheme Sirsa Manjholi in Solan area of Shivalik Himalayas*. 1(1), 79–86.
- [14] Muriithi, J. (2013). *Influence of Members Participation on Performance of Irrigation Projects in Meru Central District, Kenya*. Unpublished Thesis: University of Nairobi.
- [15] Mboi, S. (2018). Factors Influencing Sustainability of Small Holder Irrigation Projects in Kenya : a Case of Selected Irrigation Projects in Kirinyaga Central Sub-County. *International Academic Journal of Information Sciences and Project Management*, 3(1), 16–27.
- [16] Goldratt, E. (1990). *What is this thing called the Theory of Constraints?* North River Press, Croton-on-Hudson, NY.
- [17] Smith, J. & Jagger, D. (2010). “*Technology and Engineering Cost*” Planning for Design Team.
- [18] Cuthbert, D. (2011). *Successful Fundraising: A strategic and Practical Guide*, Evangel Publishing House.
- [19] Chitere, P. (2012). *Community Development: Its inception and Practice with Emphasis on Africa*, Gideon S. Were Press, Nairobi.
- [20] Crivelli, H. & Gupta, C. (2013). *Public-Private Initiatives in Resource Mobilization*. Unpublished Doctor of commerce thesis, Pretoria University of Pretoria
- [21] Miller, A. & Lessard, L. (2011). Understanding Organization Structure in Project Implementation. *European Management Journal*, 17(3): 239-51.
- [22] Ashaye, O. R. (2010). *E-government in land administration in developing countries: A system analysis*. Doctoral Symposium 2010,BBS, Brunel University. Retrieved from <http://www.brunel.ac.uk/329/BBS%20documents/PhD%20Doctoral%20Symposium%2010/OlusoyiAshaye.pdf>
- [23] Jenkins, C. (2011). Resource Mobilization Theory and the Study of Social Movements. *Annual Review of Sociology*, 9: 527–553.
- [24] Argote, W. (2010). *Estimating Household Willingness for local contributions for Self Help Groups in Rural Kenya*. McMillan Publishers, Nairobi
- [25] Bowen, A., Hall, A., Edwards, J., Pearl, G. & Cattell, S. (2010). Perceptions of Time, Cost and Quality Management on Building Projects. *The Australian journal of construction economics and building*, 2(2): 48-56
- [26] Hussin, A. & Omran, A. (2011). *Implication of non-completion projects in Malaysia*. ACTA Technica Corviniensis-Bulletin of Engineering, University Polytechnica Timisoara. Romania

- [27] Nixon, P., Harrington, M. & Parker D. (2012). Leadership performance is significant to project success or failure: a critical analysis. *International Journal of Productivity and Performance Management*, 61, p- 204- 216.
- [28] Lawrence, M. (2013). *The Effects of Risk Management at Project Planning Phase on Performance of Construction Project in Rwanda*. Unpublished Master thesis Jomo Kenyatta University of Agriculture and Technology.
- [29] Choge, K. & Muturi, WM. (2014). Factors affecting adherence to cost estimates: A survey of construction projects of Kenya National Highways Authority. *International Journal of Social Sciences and Entrepreneurship*, 1(11):689-705.
- [30] Lekan, A., Opeyemi, J. & Olayinka, O. (2013). Performance of Build-Operate-Transfer Projects: Risks' Cost Implications from Professionals and Concessionaires Perspective. *European International Journal of Science and Technology*, 2(3): 239- 250
- [31] Ameh, O. J., & Osegbo, E. E. (2011). Study of relationship between time overrun and productivity on construction sites. *International Journal of Construction Supply Chain Management*, 1 (1). 56-67.
- [32] Mugenda, O. M. and Mugenda, A. G. (2003). *Research Methods: Quantitative and Qualitative Approaches*, Acts Press: Nairobi.
- [33] Babbie, E. (1990). *Survey research methods* (2nd Ed.). Belmont, CA: Wadsworth Publishing.