Abstract: Across the world; government and non-Government funded projects are embracing the practice of team communication in anticipation that this will translate into improved performance. Attention is given to the practice of team communication since its joins the organization members together in order to achieve common objectives. It is the most important factor in organization functions, and without it, there is no production. In the project environment, a Project Manager may spend ninety percent or more of his or her time communicating. Effective project team communications ensure that the right information get to the right person at the right time and in a cost-effective manner. The problem is, despite a consensus among scholars, researchers and managers that team communication leads to project performance, there are still cases of project failure Worldwide especially in Rwanda where the poverty reduction project’s failure rate was over 60% generally in Africa and specifically 70% in Rwanda until 2013 as reported by World Bank Report of June 2011. The general objective of this study was to assess the effect of team communication on performance of poverty reduction projects in Rwanda. It adopted descriptive design. The target population of this study was the team members of Rural Sector Support Project and beneficiaries. This included 96 employees considered as the Rural Sector Support Project team and 235 farmers cultivating the marshlands in Gatsibo district, a sample size of 182 respondents has been calculated using Yamane Yalo formula. Quantitative data were collected using questionnaires. Data presentation was done using tables of frequency for ease of understanding and interpretations. Statistical Package for Social Sciences was used to execute simple linear regressions. Correlation analysis was used to describe the effect of project team communication on performance of poverty reduction projects in Rwanda. The study concluded that communication channels have an effect on performance of Rural Sector Support Project. The team communication practices influence performance of Rural Sector Support Project at the level of 62.3% hence a significant relationship between team communication practices and performance of Rural Sector Support Project. Communication planning is influencing the performance of Rural Sector support project at the level of 68.8%. Therefore there is a significant relationship between communication planning and performance of Rural Sector support project. The researcher recommends the project managers and superiors to strengthen and facilitate the communication channels within and out of the organization to make the communication effective, an enhancement of the internal team communication practices like project team members’ meeting, management meeting, clarification of schedule of work and feedback provision among the project team members and allocation of communication budget and establish a clear flow a clear flow of information from top to down and down to top so as to ensure the effective sharing of the information about project concerns.

Keywords: Project, Project Team communication, Performance of poverty reduction projects

1. Introduction

Communication is considered among the most critical factors for success in project management practice. It is also perceived as the fuel that significantly contributes to the project running smoothly as well as the glue that holds a project team together (Smiths, 2011). In a poverty reduction project, achieving coordinated results and understanding the needs of the project beneficiaries greatly depends on the effectiveness of the communication (Watson et al, 2015). Additionally, the recognized positive relationship between project team communication and project performance makes attaining effective communication a sine qua non. It is also perceived as the 'central nervous system' of project organizations ensuring that project processes progress smoothly (Madlock, 2008). Project management is responsible for achieving efficiency, effectiveness, and innovation (Maynard et al 2008). Most organizations understand that effective communication at all levels of the organization improves organizational performance but on the other side, others do not. Communication in the workplace, also known as organizational communication, has existed from ancient times and is probably more important in modern, complex organizations. The way employees communicate today compared to the way employees communicated in the last several decades have also changed (Miller, 2015). Effective communication helps improve function, meet the goals, and maintain relationships in organizations. It plays a vital role in the functioning of any organization, whether it is for business, nonprofit, educational, or government organizations. Effective communication affects a wide variety of components in an organization and can aid in achieving greater project performance (Conrad, 2014).

According to Osman, the most critical challenge faced by Project teams is the element of communication. A project’s performance often hinges on how effectively cross-team communication is conducted. Achieving effective communication is difficult, and it is even more difficult...
when project teams are spread across different locations (Osman, 2011). Hence, managers, project management practitioners and project management students would benefit from this research by acquiring practical insights into, as well as knowledge-related theories about, managing communication within project teams. The field of poverty reduction project management is not likely to see a decline in the coming years. In addition, it is likely that today’s project management is coupled with the increased costs, tight schedules, and high expectations of beneficiaries. This is why there is a need for more research into this area (Clark, 2010).

According to RSSP Project design report (2001), Rwandan rural poverty has multiple causes but there is a general agreement that a central explanation lies in the declining land availability per household. The poverty rate is 74% for those households with less than 0.3 ha, 67% for households with up to 1 ha and 54% for those households that have more than 1 ha. Declining soil productivity along with high demographic pressure is a further explanation for poverty as returns from agricultural production decline and economic growth is outstripped by population growth. Agriculture is the main source of income for 80% of the population of 10.4 million and contributes 40% to GDP. Family landholdings averaging 0.76 ha are cultivated through complex mainly rain fed farming systems in which food crops cover 67% of the area, mainly for family consumption. The Rural Sector Support Project (RSSP) is within the Ministry of Agriculture and Animal Resources. Its objective is to reduce poverty in rural areas through increased agricultural production and income. The project is funded by the World Bank through a three-phase adaptable program loan (APL) to be implemented in 15 years (RSSP design report, 2001).

2. Statement of the Problem

Across the world, government and non-Government funded projects are embracing the practice of team communication in anticipation that this will translate into improved performance. Attention is given to the practice of team communication since it joins the organization members together in order to achieve common objectives (Wiio, 2009). It is the most important factor in organization functions, and without it there is no production. In the project environment, a Project Manager may spend ninety percent or more of his or her time communicating to stakeholders. Effective project team communications ensure that the right information get to the right person at the right time and in a cost-effective manner. Proper communication is vital to the success of any project (Kerzner, 2009). As stated by Dow and Taylor (2008), communication is the key to keeping team members, managers, and stakeholders informed and on track to pursue the project objectives. Communication is also the key to identifying issues, risks, misunderstandings, and all other challenges to project completion (Vaananen, 2010).

Most of scholars, researchers and managers alike agree that effective team communication is crucial if project objectives are to be met (Kerzner, 2009, Dow & Taylor, 2008, Wiio, 2009, Vaananen, 2010, Lehton, 2004 and Kezsbon, 2006). The problem is, despite a consensus among scholars, researchers and managers that team communication leads to project performance, there are still cases of project failure Worldwide especially in Rwanda where the poverty reduction project’s failure rate was over 60% generally in Africa and specifically 70% in Rwanda until 2013 as reported by World Bank Report of June 2013. This therefore raises serious issues as to whether team communication is effective enough to achieve performance of projects. Rural Sector Support project used a budget of 11.2 million USD in poverty reduction activities in Eastern province (MINAGRI, 2017). However, despite the huge amount of money used by Rural Sector Support project, its performance is doubtful and most of critics are directed to poor communication between project team and all stakeholders in general. Therefore this study aimed at assessing the effect of project team communication on performance of Rural Sector Support project in Eastern province of Rwanda.

3. Objectives of the Study

The general objective of this study was to assess the effect of team communication on performance of poverty reduction projects in Rwanda. The study was guided by three specific objectives:
1. To assess the effect of communication planning and internal team communication practices on performance of Rural Sector Support Project
2. To examine the effect of internal team communication practices on performance of Rural Sector Support Project
3. To analyze the effect communication planning and internal team communication practices on performance of Rural Sector Support Project on its performance

4. Conceptual Framework of the Study
5. Methodology

- **Research Design**: The study adopted descriptive design
- **Target Population**: The target population of this study was the team members of Rural Sector Support Project (RSSP) and beneficiaries. This included 96 employees considered as the Rural Sector Support Project team and 235 farmers cultivating the marshlands, meaning that the entire population for this study was 331 people.
- **Sample size**: The sample of 182 respondents was determined from total population using formula of Yamane (1967).
- **Data Collection Instruments**: The quantitative data were collected using questionnaires and they were made of close ended questions. This will allowed for intensity and richness of individual perception in responding the asked questions (Babbie, 2008).

6. Research Findings

6.1 Effect of project communication channels on the performance of rural sector support project

This section describes the correlation between project team communication and project performance.

Table 1: Correlation between communication channels and performance of Rural Sector Support Project

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Communication channels</th>
<th>Project perf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comm_ Channels</td>
<td>Pearson Correlation 1</td>
<td>.789** 0 182</td>
</tr>
<tr>
<td>N</td>
<td>182</td>
<td>182</td>
</tr>
<tr>
<td>Proj Perf</td>
<td>Pearson Correlation .789**</td>
<td>0 182</td>
</tr>
<tr>
<td>N</td>
<td>182</td>
<td>182</td>
</tr>
</tbody>
</table>

Source: Field Data (2017)

The findings in Table 1 revealed that, the correlation between project communication channels and project performance was at the rate of 0.789 meaning that project team communication influences performance of Rural Sector Support Project (RSSP) at the level of 78.9%. This proves the correlation between project team communication and RSSP performance. By considering the level of significance which is 0.05, there is significant relationship between project team communication and RSSP performance where their p-value (0.000) is statistically significant at 5% level of significance. Therefore project team communication has a significant effect on performance of Rural Sector Support Project.

6.2 Correlation between internal communication practices and the performance of the project

This section describes the correlation between project team communication and project performance.

Table 2: Correlation between internal communication practices and the performance of the project

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Team Comm. practice</th>
<th>Proj perf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intern Commpractices</td>
<td>Pearson Correlation 1</td>
<td>.623**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0 182 182</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>182</td>
<td>182</td>
</tr>
<tr>
<td>Projperf</td>
<td>Pearson Correlation .623**</td>
<td>1 182</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0 182 182</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Data (2017)

The findings in Table 2; revealed that the results of correlation between team communication practices and performance of project was at the rate of 0.623 meaning that the team practices influence performance of Rural Sector Support Project at the level of 62.3% hence a significant relationship between team communication practices and performance of RSSP. If the null hypothesis states that there is no relationship between team communication practices and performance of RSSP project while the alternative hypothesis states that there is relationship between team communication practices and performance of RSSP project; by taking into account the information provided in table 16, the H1 will be accepted and the H0 will be rejected. Furthermore, by considering the level of significance which is 0.05, there is a significant relationship between team communication practices and performance of RSSP project.
because their p-value (0.000) is statistically significant at 5% level of significance.

6.3 Analysis of the effect of communication planning on performance of Rural Sector Support Project

Table 3: Correlation between communication planning and performance of Rural Sector Support Project

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>Project performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication planning</td>
<td>0.623*</td>
<td>0.182</td>
<td>0.182</td>
</tr>
<tr>
<td>Project performance</td>
<td>0.688**</td>
<td>0.182</td>
<td>0.182</td>
</tr>
</tbody>
</table>

Source: Field Data (2017)

Table 3 revealed that, the results of correlation between communication planning and performance of Rural Sector Support Project was at the rate of 0.688 meaning that communication planning is influencing the performance of Rural Sector support project at the level of 68.8%. Therefore there is a significant relationship between communication planning and performance of Rural Sector support project. If the null hypothesis is formulated stating that there is no relationship between communication planning and performance of Rural Sector support project. And if the alternative hypothesis is formulated stating that there is a relationship between communication planning and performance of Rural Sector support project; in such case according to the above results the null hypothesis would be rejected and accept the alternative hypothesis. On the other hand, by considering the level of significance which is 0.05, hence team communication planning has a significant effect on the performance of Rural Sector support project because their p-value (0.000) is statistically significant at 5% level of significance. Hence a strong correlation between team communication and performance of Rural Sector support project

Rural Sector support project performance

In order to analyze the effect of team communication on performance of Rural Sector Support projects in Rwanda, the researcher requested the respondents to rate the performance of Rural Sector Support Project by following different attributes.

Table 4: Rural Sector Support Project Performance

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>complete time</td>
<td>34</td>
<td>18.7</td>
<td>9.7</td>
</tr>
<tr>
<td>reduced poverty</td>
<td>49</td>
<td>26.9</td>
<td>23.7</td>
</tr>
<tr>
<td>Agric production</td>
<td>69</td>
<td>37.9</td>
<td>43.6</td>
</tr>
<tr>
<td>planned cost and time</td>
<td>96</td>
<td>52.7</td>
<td>71</td>
</tr>
<tr>
<td>Outcome RSSP</td>
<td>101</td>
<td>55.5</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Field Data (2017)

The study findings in Table 4 revealed that, 18.7% of all respondents agree that the projects were completed within time, 2.9% of all respondents confirmed that the projects funded by Rural Sector Support reduced poverty in rural areas while 37.9% of all respondents reported that Rural Sector Support Project increased agricultural production and income in rural areas. Furthermore a total of 52.7% of all the study participants confirmed the completed phases (1&2), met the planned cost and time. On the other hand 55.5% of all respondents revealed that the projects beneficiaries were satisfied of the outcomes of Rural Sector Support Project.

6.4 Presentation of Analysis on Effect of Team Communication on Performance of Poverty Reduction projects in Rwanda

Table 5: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.657</td>
<td>0.431</td>
<td>0.422</td>
<td>0.69316</td>
</tr>
</tbody>
</table>

Source: Field Data (2017)

Table 6: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>64.813</td>
<td>3</td>
<td>21.604</td>
<td>44.965</td>
<td>.000*</td>
</tr>
<tr>
<td>Residual</td>
<td>85.523</td>
<td>178</td>
<td>0.48</td>
<td>0</td>
<td>182</td>
</tr>
<tr>
<td>Total</td>
<td>150.335</td>
<td>181</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: Field Data (2017)

Table 7: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.553</td>
<td>0.127</td>
<td>-4.348</td>
<td>0</td>
</tr>
<tr>
<td>Independent variables</td>
<td>0.618</td>
<td>0.053</td>
<td>0.657</td>
<td>11.564</td>
</tr>
<tr>
<td></td>
<td>-0.058</td>
<td>0.064</td>
<td>-0.059</td>
<td>-0.91</td>
</tr>
<tr>
<td></td>
<td>0.023</td>
<td>0.058</td>
<td>0.025</td>
<td>0.392</td>
</tr>
</tbody>
</table>

Source: Field Data (2017)

a. Dependent Variable: Rural Sector Support performance
b. Predictors: (Constant), Independent Variable

The study sought to establish the effect of team communication on performance of Rural Sector Support performance. The Rural Sector Support performance indicators include reducing poverty in rural areas, increasing agriculture production and increased income in rural area. An$R^2 = .431$, indicates that 43.1% of variation in project team communication in terms of communication channels, team communication practices and communication planning can be explained by the variation in Rural Sector Support performance leaving only 56.9% of the variation in the dependent variable being explained by the error-term or other variables other than Rural Sector Support Project performance. The results indicate that communication channels, communication practices and communication planning have statistically significant effect for effective project team. The positive coefficient of determination indicates that there is positive correlation between communication channels, communication practices, communication planning and performance of Rural Sector Support Project. The $b_1$, $b_2$, $b_3$ of Rural Sector Support performance are 0.618; -0.058 and 0.023 with a statistically significant (p = 0.000). Therefore, the model equation
The model equation derived was: \[ y = 0.553 + 0.618x_1 - 0.058x_2 + 0.023x_3 + e. \] The positive coefficient further demonstrates that a 1% increase in the performance of project in terms of communication channels is attributed to 0.618% improvement in Rural Sector Support performance and the high t-statistic value (11.564) indicates the effect is statistically significant at 95% confidence level.

An increase of 1% on the performance of project in term of communication practices will decrease the Rural Sector Support performance given by 0.058% at the high t-statistic value (-0.910) indicates the effect is statistically significant at 95% confidence level while a positive coefficient demonstrates a 1% increase in the performance of project in term of team communication practices is attributed to 0.023% improvement in Rural Sector Support performance and the high t-statistic value (0.392) indicates the confidence level of 95% the effect is statistically significant. This demonstrates that Rural Sector Support performance exhibited in terms of communication channels, communication practices and practices for effective project team communication are exhibited and executed excellently.

7. Conclusions and Recommendations of the Study

7.1 Conclusions

Based on the interpretation of collected and analyzed data during the course of this study the researchers come up with the following conclusions:

Communication channels have an effect on performance of Rural Sector Support Project. The team communication practices influence performance of Rural Sector Support Project at the level of 62.3% hence a significant relationship between team communication practices and performance of Rural Sector Support Project. Communication planning is influencing the performance of Rural Sector support project at the level of 68.8%. Therefore there is a significant relationship between communication planning and performance of Rural Sector support project. The Rural Sector Support performance indicators include reducing poverty in rural areas, increasing agriculture production and increased income in rural area. \( R^2 = 0.431 \), indicates that 43.1% of variation in project team communication in terms of communication channels, team communication practices and communication planning can be explained by the variation in Rural Sector Support performance leaving only 56.9% of the variation in the dependent variable being explained by the error-term or other variables other than Rural Sector Support Project performance.

The results indicate that communication channels, communication practices and communication planning have statistically significant effect for effective project team. The positive coefficient of determination indicates that there is positive correlation between communication channels, communication practices, communication planning and performance of Rural Sector Support Project. The \( R^2 \) of Rural Sector Support performance are 0.618; -0.058 and 0.023 with a statistically significant (\( p = 0.000 \)). Therefore, the model equation derived was: \[ y = 0.553 + 0.618x_1 - 0.058x_2 + 0.023x_3 + e. \] The positive coefficient further demonstrates that a 1% increase in the performance of project in terms of communication channels is attributed to 0.618% improvement in Rural Sector Support performance and the high t-statistic value (11.564) indicates the effect is statistically significant at 95% confidence level. An increase of 1% on the performance of project in term of communication practices will decrease the Rural Sector Support performance given by 0.058% at the high t-statistic value (-0.910) indicates the effect is statistically significant at 95% confidence level while a positive coefficient demonstrates a 1% increase in the performance of project in term of team communication practices is attributed to 0.023% improvement in Rural Sector Support performance and the high t-statistic value (0.392) indicates the confidence level of 95% the effect is statistically significant. This demonstrates that Rural Sector Support performance exhibited in terms of communication channels, internal team communication practices and communication planning.

7.2 Recommendations

The study has established the effect of project team communication on performance of Poverty Reduction Projects in Rwanda and has considered Rural Sector Support Project as the case study and it therefore recommends:

1) The researcher recommends the project managers and superiors to strengthen and facilitate the communication channels within and out of the organization to make the communication effective.

2) An enhancement of the internal team communication practices like project team members’ meeting, management meeting, clarification of schedule of work and feedback provision among the project team members

3) Allocation of communication budget and establish a clear flow a clear flow of information from top to down and down to top so as to ensure the effective sharing of the information about project concerns

7.3 Suggested areas for further research

This study suggests further researches to be conducted in the areas of:

1) Teamwork and its impact on project performance.
2) Effect project team management practices on projects performance in agricultural sector.

References


