THE IMPLICATION OF ACCOUNTABILITY ON PERFORMANCE OF SOCIO-ECONOMIC DEVELOPMENT PROJECTS IN RWANDA

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Abstract: In the year 2000 the government of Rwanda launched vision 2020, a governmental development program with the objective of transforming the country into a knowledge-based middle-income country, thereby reducing poverty, health problems and making it a democratic country by 2020. The study examined the implication of accountability on performance of socioeconomic development projects in Rwanda. Data triangulation was conducted (qualitative and quantitative data collection method) to answer specific research questions. This study used multiple sampling techniques to select the respondents of the study. Judgmental, purposive random sampling technique and simple random sampling technique were used to get the sample of households and interviewees households to be included in the study. Bugesera and Kirehe are Districts in Eastern Province of Rwanda. Cronbach’s alpha was used to test for internal reliability of each variable used in the study. Data analysis was done using descriptive statistics, correlation and regression analysis. The study found out that governance dimensions have a significant influence on performance of socioeconomic development projects in Rwanda. Institutional factors act as intervening variable that explain the relationship between accountability and performance of socioeconomic development projects. The study concluded that accountability had a significant influence on performance of socioeconomic development projects and that institutional factors had significant influence on the relationship between accountability and performance of socioeconomic development projects. The study recommends that governance dimensions under study that is accountability be sustained to get better performance of socio-economic development projects in Rwanda.

Keywords: Accountability, development projects, socio-economic

1. INTRODUCTION

Ocampo & Arteaga (2014) defines three major dimensions of accountability as being answerability, which implies the obligation to inform, explain and justify decisions and actions; enforcement, referring to the capacity of accounting agencies to impose sanctions on public sector officials who violate their duties; as well as a clear delimitation of responsibility, which refers to the requirement that all actors should have clearly defined duties and performance standards. The World Bank Group (2007), also states that systems of checks and balances built into government structures have formed the core of good governance and helped empower citizens for more than two hundred years particularly in the developed world; and that the incentives that motivate public servants and policy makers—the rewards and sanctions linked to results that help shape public sector performance—are rooted in a country’s accountability frameworks. The World Bank Group (2007) further states that sound public sector management and government spending help determine the course of
economic development and social equity, especially for the poor and other disadvantaged groups, such as women and the elderly.

Socioeconomic development projects are designed to generate sustainable economic and social benefits for local communities and for the population in general. They are essentially community-driven in nature and aim at redistributing national resources to the community to bring facilities and services closer to people in order to alleviate poverty, create employment, and eventually raise people's standard of living through better schools, healthcare facilities and the like. While large construction projects are concerned with developing the infrastructure and backbone of an economy, development projects attempt to directly improve the socioeconomic condition of people in a developing nation through various types of projects. The traditional criteria of performance evaluation of projects, popularly known as the iron triangle are mainly based on the economic dimension. However, development projects are also expected to fulfill other goals including social goals in addition to the economic one (Ngacho & Das, 2017).

One of the avenues of dealing with the challenges of poverty and unemployment; and with similar challenges therefore has been to invest in socioeconomic projects. They are expected to empower the communities by providing them with employment and help alleviate poverty. They contribute to socioeconomic development. Socio-economic development, a process of social and economic development in a society, is measured with indicators, such as life expectancy, literacy and levels of employment. Changes in less-tangible factors, such as personal dignity, personal safety and freedom from fear of physical harm, as well as the extent of participation in civil society are also considered (Rutherford, 2000). One of the critical challenges today, however, is how to fund the basic systems and services that countries need to function in a difficult financial climate; and how to ensure that investments made in socioeconomic projects translate into well-being for the population (Bingham et al., 2005).

1.1 Problem Statement

The implication of accountability on performance of socio-economic development projects cannot be over emphasized. Projects that embrace strong accountability tend to perform well. On the other hand, those that display weak accountability tend to perform poorly and are, consequently, unable to benefit communities. Many governance dimensions exist but, for the purpose of this study, focus will be laid on accountability. Previous studies seem not to explicitly examine the link between accountability and performance of projects and the extent to which accountability would otherwise influence performance of socio-economic development projects. Moreover, the lack of affordable access to relevant information and knowledge services among the rural poor has been cited as a concern to development economists for some time. (Jensen, 2007). The problem being addressed here is the performance of socioeconomic development projects, on whose livelihood the citizenry depend, as influenced by accountability as a significant dimension of governance. The study, therefore, sought to examine whether or not accountability influences the performance of socioeconomic development projects focusing on post genocide Rwanda.

1.2 Objective

To investigate the implication of accountability on the performance of socio-economic development projects in Rwanda.

1.3 Hypothesis

This study tested the following null hypothesis:
Ho: Accountability does not have a significant influence on socio economic development projects’
performance in Rwanda.

2. LITERATURE REVIEW

2.1 Accountability and Performance of socioeconomic development Projects

Accountability is characterized by notorious ambiguity and can have different meanings; which is a series of
interchangeable and often related concepts such as, answerability, transparency and responsibility have been
used, over the years to explain the phenomenon (Sinclair, 1995; Dubnick & Justice, 2004). Basically,
accountability involves the implicit and explicit expectations regarding the provision of accounts. Bovens
(2005) emphasized the need for individuals or organizations to answer or provide a justification about how
they have conducted themselves or affairs in the way they did. However, some authors are strict in the sense
that they emphasize the need for rewards or sanctions as an instrument to formalize the concept of
accountability (Bovens, 2010). Robert & Scapens (1985) and Gray & Jenkins (1993) on the other hand, state
that the concept of accountability is primarily associated with power delegation from stakeholders also referred
to as principals to managers also referred to as agents. There are indeed so many definitions of the concept that
makes it problematic to narrow down. Smyth (2012) on his part argued that this confusion might be a problem
and might saturate the literature on accountability. Overall, the argument here is that accountability needs to
move beyond the constraints that any of the above concepts is synonymous to its meaning.

2.2 Accountability as a mechanism

Accountability as a mechanism usually involves the provision of information by an actor, public official or
organization to a forum for instance, institutions, activist groups, or committees; debates between parties, and
the imposition of sanctions, formal or informal, on occasions where the actor is found to have carried out an
illicit act or underachieved (Bovens, 2010; Hood, 2010; Joannides, 2012). Bovens (2005) argued that the first
and foremost function of public accountability is that the public can pass open judgment on performances and
sanction appropriately. He explained that this process ensures that actors - individuals, public officials and
others give account for their conducts. Furthermore Bovens (2010) framed the concept of accountability as a
mechanism within four interrelated questions; namely for what, by which means, who and to whom? Dubnick
(2002) argues that the answers to these questions are not simple, especially in complex western democracies
such as the United Kingdom and United States of America, where public officials are required to face multiple
sources of legitimate authority and competing expectations for performance.

2.3 Performance of socio-economic projects

Ruhanen (2010) argued that despite the proliferation of the governance concept in the broader academic
literature, there is little agreement on definitions, scope and what actually constitutes governance arguably due
to the fact that empirical research on the topic, with some exceptions, is generally limited to case studies
without use of any common conceptual framework. Zawicki (2015) on the other hand, in his conceptual
foundations- a critical review, citing a number of authors make scathing attacks on governance literature stated
that in the theory of public management, governance has multiple meanings and interpretations including
interalia public governance as the third ideal model of coordinating collective action, along with hierarchy and
the market; and public governance as a hybrid coordination model that integrates hierarchical, market and
network coordination mechanisms. Public governance as an ideal model he argued is an idealized structure
which does not occur in practice. The understanding of public governance as a hybrid model of coordinating
collective action explains the practice and consequences of using governance attributes in the implementation of public policies.

In the first, idealized sense, Zawicki (2015) argued, governance is equated with self-organization, interorganizational networks or public policy networks; while network-based coordination mechanisms constitute only specific styles of governance, apart from which the relationships within and amongst the public, the economic and the civic sector are shaped by hierarchies, markets and communities. Accordingly, governance does not consist exclusively in cooperation, but also in competition and conflict resolution. Mechanisms of network formation and operation as well as the issues of adjusting governance styles and mechanisms to specific circumstances and context constitute important elements of governance thus conceived.

Zawicki (2015) further stated that the basic hybrid forms of governance include oligopolies which are a market-based model with clearly outlined network elements and forms of coordination not limited to business entities; a public-private partnership which constitute a combination of market and network mechanisms; a chain management constituting a form of network management based on functional not social relationships among actors, which also includes hierarchical relationships. He concluded that both types of governance give rise to considerable controversy arguing that the ideal type, although normative and abstracted from social reality, may be criticized from a theoretical point of view and for the formulation of generalized conclusions. In contrast, he further argued that the hybrid approach, due to its practical applications, can be subject to critical reflection on the pragmatic dimension of public governance.

Zawicki (2015) also emphasized that the theoretical and empirical aspects of public governance are difficult to separate because of the complex causal relationships existing in the order of governance, in which causes have both a theoretical-normative and pragmatic character, and a mixed network-market-hierarchical substance. In his view criticism of governance conducted at the theoretical-normative level focuses on axiological and epistemological issues leading to fundamental questions asked of the proponents of this paradigm including whether it constitutes an appropriate and worthwhile response to social change; whether the concept is sufficiently well-defined and mature; whether it corresponds to social expectations; What the social consequences of its implementation would be; What the role of the state in this paradigm should be; What its cognitive limitations are; as well as what threats to democracy and social justice are likely to result from the implementation of governance. He further made the argument that various theorists challenge the status of governance due to its limited cognitive and scientific utility, which results from imprecise definitions of this concept; and citing Peters (2000) also made the argument that governance is a tautology, since it comes down only to the statement that whatever happens, governance exists; and observed that Frederickson (2007) was even more critical towards the concept stating that it is freighted with values. Jessop (2003); Zawicki (2015) claimed, believed that the term has become exceptionally blurred and can be applied to almost anything, and for that reason it does not describe anything, let alone explain anything suggesting though that its further conceptualization should be preceded by identification of a wide range of issues applicable to the coordination of collective action; and that relevant public governance issues should be placed among them; if the essence of public governance was to be carefully and accurately defined.
2.4 Conceptual Framework

From the conceptual framework, analyses of influences of the independent variable (Accountability) measured by parameters such as monitoring, mechanisms and independent oversight, dialogue with stakeholders and participatory processes in decision making and quality of information provision and response; on the dependent variable (Performance of socio-economic development projects) as reflected by access to services, empowerment and stakeholder satisfaction were made arriving at the conclusion that accountability has a significantly positive influence on performance of socioeconomic development projects; and that cultural, political and technological factors also positively influence performance of socioeconomic development projects.

3. METHODOLOGY

This study employed a before and after study design as well as a mixed research design. Data triangulation was conducted. The before and after study design also known as pre-test and post-test study design consists of studying one study population at two different points in time with a view to establishing change in a phenomenon or variable. In this study it was used because it is intended to determine whether or not residents had been empowered; and accessed better services following the advent of the projects as well as the level of satisfaction of stakeholders. The study population for this research comprised of the residents of Bugesera and Kirehe districts also known to be the beneficiaries of the Bugesera agriculture development support project and the Kirehe watershed management project. According to the fourth Rwanda Population and Housing census, Bugesera district which is composed of 15 sectors has a total population of 361,914 persons while Kirehe district composed of 12 sectors has a total population of 340,368 persons (GoR, 2012). The two districts thus constituted 27 per cent of the overall population of Rwanda then.

3.1 Sampling Technique and Sample size

In their study of effect of credit management system on financial performance of development Bank in Rwanda, Kalimba et al (2016) chose to use Slovin’s formula arguing that the formula allows a researcher to sample the population with a desired degree of accuracy. Slovin’s formula was used to calculate the sample size.
size. this study sample size was determined from target population of 61500, being the target beneficiary households in Bugesera district (13,500) and in Kirehe district they (48,000), using the said Slovin’s formula;

\[ n = \frac{N}{1+N\cdot e^2} = \frac{61500}{1+61500\cdot (0.05)^2} = 397.415 \approx 397 \]

where \( n \) is the sample size, used for KWAMP and PADAB respectively. \( N \) is the total population and \( e \) is margin error for allowed probability of committing an error in selecting a small representative of the population.

\[ e = (1 – \text{Confidence level}) = (1 - 0.95) = 0.05 \]

This study used purposive sampling technique for selecting respondents that were given interview guides. Simple random sampling was used to select respondents from the sample size within the beneficiary households in Bugesera and Kirehe districts.

**4. FINDINGS PRESENTATION, INTERPRETATION AND DISCUSSION**

**4.1 Pilot Results**

Pretest was done on the small – scale that consisted of 162 sample size, were data was collected and analyzed and interpreted as follows in the following sub-sections.

**4.2 Reliability**

According to Bogere & Gesa, (2018); and Amin, (2005) reliability refers to how consistent a research procedure or instrument is. It is the degree of consistency or repeatability of findings. In other words, if the study were to be done a second time, would it yield the same results? If so, the data are reliable. It implies that if more than one person is observing behavior or some event, all observers should agree on what is being recorded in order to claim that the data are reliable. Reliability also applies to individual measures. When people take a vocabulary test two times, their scores on the two occasions should be very similar. If so, the test can then be described as reliable. To be reliable, an inventory measuring self-esteem should give the same result if given twice to the same person within a short period of time. IQ tests should not give different results over time since intelligence is assumed to be a stable characteristic. Sasaka et al., (2014) on the other hand pointed out that reliability is the ability of the research instrument to give the same answer in the same circumstances from time to time. If respondents answer a questionnaire the same way on repeated situations, then the questionnaire is said to be reliable.

**Table 4.1 Case Processing Summary**

<table>
<thead>
<tr>
<th>Cases</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>162</td>
<td>100.0</td>
</tr>
<tr>
<td>Excluded</td>
<td>0</td>
<td>.0</td>
</tr>
<tr>
<td>Total</td>
<td>162</td>
<td>100.0</td>
</tr>
</tbody>
</table>

a. List wise deletion based on all variables in the procedure.
This study conducted a pilot test analysis to ascertain if the research instrument would bring out reliable information. The number of items tested in the pilot study questionnaire was 162. Cronbach’s alpha was used to determine the reliability of the questionnaire used in this study. In their study, Theuri et al., (2015) showed that Cronbach’s alpha values ranges between 0 and 1.0; while 1.0 indicates perfect reliability, the value 0.70 is deemed to be the lower level of acceptability. The reliability statistic for the questionnaire items is presented in the Table 4.2. The analysis established that the Cronbach’s Alpha $\alpha= 0.820$, which means that the questionnaires’ internal reliability, was high and consistent. According to the Cronbach’s Alpha 0.70 to 0.90 = High reliability, questionnaire items were acceptable and highly reliable.

Factor analysis was used to check validity of the constructs in this study. Factor analysis (FA) is an exploratory technique applied to a set of observed variables that seeks to find underlying factors or subsets of variables, from which the observed variables were generated. Several tests were used to assess the suitability of the respondent data for factor analysis prior to extraction of the factors. The tests included Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett’s Test of Sphericity.

### Table 4.3 KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .872 |
| Approx. Chi-Square | 6320.950 |
| Bartlett's Test of Sphericity | df 15 |
| Sig. | .000 |

The study applied the KMO Measures of Sampling Adequacy and Bartlett’s Test of Sphericity to test whether the relationship among the variables was significant or not as shown in Table 4.3 below. The Kaiser-Meyer-Olkin Measures of Sampling Adequacy shows the value of test statistic as 0.872, which is greater than 0.5 hence an acceptable index. While Bartlett’s Test of Sphericity shows the value of test statistic as 0.000 which is less than 0.05 acceptable indexes. These results indicate a highly significant relationship among variables.

### Table 4.4 Model Summary - KWAMP

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.967$^a$</td>
<td>.935</td>
<td>.934</td>
<td>.18497</td>
</tr>
</tbody>
</table>

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$^a$ Predictors: (Constant), Institutional factors, Accountability
Table 4.5 Multicollinearity- KWAMP

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
</tr>
</tbody>
</table>

a. Dependent Variable: performance of socioeconomic development projects – KWAMP

Table 4.6 Model Summary- PADAB

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.891*</td>
<td>.794</td>
<td>.792</td>
<td>.47747</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Institution factors PADAB, Accountability PADAB

Table 4.7 Multi Collinearity Statistics-PADAB

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
</tr>
<tr>
<td></td>
<td>Accountability</td>
</tr>
</tbody>
</table>

a. Dependent Variable: performance of socio-economic development projects PADAB

Mugenda & Mugenda (2012) state that Multicollinearity can occur in multiple regression models in which some of the independent variables are significantly correlated among themselves. In a regression model that best fits the data, independent variables correlate highly with dependent variables but correlate at best minimally with each other. Multicollinearity is thus a case of multiple regression in which the predictor variables are themselves highly correlated. Multicollinearity is associated with Variance inflation factor (VIF) above 5 and tolerance below 0.2. More specifically a commonly given rule of thumb is that the variance inflation factor (VIF) of 10 or higher; and tolerance below 0.2 may be a reason for concern (Landau & Everitt, 2003; Makori & Jagongo, 2013). The regression analyses are tested to see if there is a presence of autocorrelation and multicollinearity in the data variance inflation frequency statistics (Ruhiu et al., 2014). The results of this study indicate that all the variables had a VIF of less than 5 and tolerance of more than 0.2 for both PADAB and KWAMP which implies that there was no multicollinearity problem as showed in table 4.5, 4.6, and 4.7. The scores of these statistical tests were accepted, implying that there was no presence of autocorrelation and multicollinearity in the data. The independent variable of the study was therefore accepted for further analysis as they did not exhibit multicollinearity.

4.3 Normality Test

The inferential methods require checking the normality assumption. The Kolmogorov-Smirnov test was first derived by Kolmogorov (1933) and later modified and proposed as a test by Smirnov (1948). If the test statistic gives large values then it indicates the data are not normal. When population parameters are unknown then sample estimates are used instead of parameter values.
5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The findings established that there was a very strong positive relationship between accountability and performance of socio-economic development projects. The principal-agent theory was found to be relevant to this study since it provides a good basis of understanding of the relationship in which one party – the principal-delegates work to the other party- the agent who then performs the task. The management of the projects, along with the local leaders in the areas where the projects are located, act as agents of the citizens, who are the principal, and had to act in good faith to fulfill the principles of the principal. Addressing principal-agent problems helps avoid poor governance practices. The principal–agent theory is therefore an appropriate paradigm to analyse accountability as a dimension of governance and whether it impacts on performance of socioeconomic development projects.

5.2 Recommendations

The recommendations are based on the study objective which is the influence of accountability socioeconomic projects in Rwanda and are derived from the findings of the study. The study established that accountability (accountability by project implementers to project stakeholders for the activities that were carried out in this project, sufficient consultation and dialogue between project stakeholders, sufficient quality information flow between project management and staff, and regular information exchange with high response between project stakeholders) positively influenced performance of socio economic development projects in Rwanda. The finding confirmed that accountability through activities accountability, sufficient consultation and dialogue between project stakeholders, sufficient quality information flow between project management and staff, and regular information exchange with high response between project stakeholders lead to transparency, total participation. The study, therefore, recommends that government, project staff and management continue to emphasize the use of performance contracts (imihigo) which are contracts between leaders and those they serve, extend them to those in leadership positions –public and private, including corporate organizations that do not currently enter into performance contracts/ Imihigo.

Citizens at the village level are very much involved in the consultations and discussions around performance contracts/ Imihigo priorities as are their representatives at higher levels. Senior policy makers and citizens both closely follow the performance of government institutions which are hotly debated at bi-annual evaluation meetings chaired by the President. Local authorities are held accountable to their targets, and civil servants can be fired for below-average performance or they opt to resign. The performance contract process gets better every year and problems including the monitoring of agreed indicators and the setting of unrealistic targets has been improving. Ensuring the contracts are properly inserted into Rwanda’s wider planning and budgeting processes has also been improving. This is usually in line with the district and national priorities that would be in line with the country’s vision. This requires that the process be sustained for all citizens to be able to better understand the requirements in their home areas and how that fits into the district and national requirements. The National Institute of Statistics and the Institute of Policy and Research (IPAR) have been at the forefront of evaluating the performance contracts supervised by the Prime Minister’s office. This study recommends more involvement of academic institutions as well as independent bodies such as think tanks. A peer review mechanism at different levels such as between local leaders, government departments and ministries should also be conducted.
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