



**Special Journal of Politics,  
and Economic Sustainability**

**Resourcing and the sustainability of Donor  
funded Potatoes Projects in Kabale District,  
Southwestern Uganda**

**Turyasingura<sup>2</sup> JB, Agaba<sup>1</sup> M, Orach-Meza<sup>2</sup> FI, Zombire<sup>2</sup> R, Kyabarongo B<sup>1</sup>**

\*\*\*\*\*

**Metadata**

**1. High Points:**

- Observed negligible participation of farmers in the resourcing of the donor-funded potato project is linked to questionable sustainability and growth of such projects in Kabale district Uganda
- Increasing the participation of potato farmers in project resourcing may impact the growth and sustainability of projects beyond funding duration
- The active participation of potato project farmers in potato project resourcing including but not limited to land donation, manure acquisition, human resources, inclusive project management from bottom-up involving local personnel may enhance the sustainability of donor-funded potato projects in Kabale District

**2. Citation:** Turyasingura JB, Agaba M, Orach-Meza FI, Zombire R, Kyabarongo B. Resourcing and the sustainability of Donor funded Potatoes Projects in Kabale District, Southwestern Uganda. Special Journal of Politics and Economic Sustainability 2022, 2(2): 1-17

**3. Addresses:** 1Department of Management Science, Kabale University, Kabale, Uganda. 2Nkumba University, Kampala Uganda, Emails: 1.[turyasingurajb@gmail.com](mailto:turyasingurajb@gmail.com) 2.[agabamosez@yahoo.com](mailto:agabamosez@yahoo.com) 3.[orachfl@nkumbauniversity.ac.ug](mailto:orachfl@nkumbauniversity.ac.ug) 4. [zoregis@yahoo.com](mailto:zoregis@yahoo.com) 5. [b.kyabarongo@gmail.com](mailto:b.kyabarongo@gmail.com)

**4. Corresponding author:** Dr. Agaba Moses, E-mail: [agabamosez@yahoo.com](mailto:agabamosez@yahoo.com). Tel: 256772358987

**5. Article history;** Received: October 23, 2021, Accepted February 18, 2022: Published

**6. Distribution and usage license:** This open-access article is distributed by the terms and conditions of the Creative Commons Attribution 4.0 International License seen in this link (<http://creativecommons.org/licenses/by/4.0/>). You are free to use, distribute, and reproduce this article in any medium, provided you give correct credit to the original author(s) and the source, including the provision of a link to the Creative Commons license website. Pls show any modification's

\*\*\*\*\*

## Abstracts

**Background:** Poor sustainability of funded potato projects occasioned by nonparticipation of potato farmers in local resourcing of funded potato projects continue to discourage donors from more investments because previously funded projects are not sustainable. Understanding the local participation-related project resourcing factors will be of profound significance in restoring the confidence of donors in the funding of potato projects.

**Objective:** To determine the effect of participatory local resourcing on the sustainability of donor-funded potato projects in Kabale District.

**Materials and Methods:** This study adopted a descriptive survey design, and it used potato farmers as the unit of analysis. Data were collected by administering questionnaires survey a sample population of 196 potato farmers. Structural equation modeling was used to test hypotheses.

**Results:** Largely for all the paradigms of project resourcing (land, cost sharing, organic fertilizer and labour) donor funded potato projects have got challenges of sustainability

**Conclusion:** Project resourcing affects the sustainability of donor-funded potato projects in Kabale District

**Recommendations:** For effective sustainability of donor-funded potato projects, donors should allow potato project beneficiaries to participate in the project resourcing through the

provision of land, inorganic manure, as well as cost-sharing so they know that, they have a stake in the project they are implementing.

**Keywords:** Project Resourcing, Potato Farmers, Sustainability and Donor Funded Potato Projects, Kabale District, Uganda

\*\*\*\*\*

## Introduction

Potatoes are the most commonly consumed staple food in Kabale District, Uganda, and thus increasing potato production output is the primary goal of both the local and central governments in the region. Potato production, on the other hand, is constrained by a lack of funds and insufficient resources. According to Pérez-Arce (1) and Bartlett (2), it has been difficult because donor funding for potato programs has been declining.

This is possibly due to a low level of participation by potato project beneficiaries in contributing to project resources such as land provision, manure provision (both organic and inorganic), and cost-sharing of project operations. They are not contributing to the project's operations, which should focus on land acquisition. There will be no ownership of the potato initiative if participants are allowed to contribute physical resources during the project's design and implementation. According to Mudege (3), agricultural land is critical to the long-term viability of donor-funded potato programs in Africa. The area is being used as a demonstration site where potato farmers can learn from one another, which is not the case with the majority of donor-funded potato programs in the United States. There is widespread agreement that successful farmers must produce more food per unit of

land than the law requires. However, there are no established procedures for the contribution of land by potato initiative beneficiaries. This is because donors are uninterested in the contributions made by potato recipients. Giovannucci (4) and Hofisi (5) believe that for agricultural projects, such as potato projects, to be sustainable, project stakeholders must contribute their resources, increasing their motivation to take ownership of their projects, which has yet to be accomplished. Donors have overlooked the concept of potato project recipients contributing land to the project, which has hurt the long-term viability of these donor-funded potato projects after the donors' support has been withdrawn. I'm referring to myself (6). There is a good chance that any involvement will have long-term benefits and repercussions on the surrounding community.

Potato growing in Kabale District has remained a thriving enterprise that has received funding from a variety of donors, including the Community Connector, the International Finance Corporation, and the Community Investment Program. All of these groups have invested a significant amount of resources to support potato programs in the district for them to remain self-sustaining once the donors have left. The fact that only a small number of potato farmers have taken part in donor-funded

potato programs in the Kabale District, however, has prevented much from being discovered. Aheisibwe et al (19). In particular, Community Connector has worked with communities in Nyemweru and Kamuganguzi Sub Counties because potato farmers groups in those areas were not fully involved in donor-funded potato projects to generate project deliverables, ensure joint venture initiatives among members, and provide support to other small potato organizations, according to the organization's website. Aheisibwe and colleagues (19).

In the previous five years, over 100 potato farmer organizations supported by the International Food Development Corporation (IFDC) and 140 potato farmers backed by CIP have become well-known. Aheisibwe and colleagues (19). Potato farmers were not involved in the design and implementation of potato projects, the allocation of potato project resources, or the monitoring and assessment of potato projects in any of the examples studied. The International Food Policy Research Institute (IFRC) is an international non-governmental organization (NGO) that works on problems such as international food policy, global hunger and poverty relief, environmental protection, and the promotion of economic development and self-sufficiency.

The organization seemed to have benefited potato farmers in particular, even though little was done in this regard. However, potato farmers were not fully informed about the methodical process of how the project will be implemented and monitored, and as a result, nothing was accomplished between 2014 and 2017. The organization engaged up

to 100 farmers, representing nearly 40% of the potato farmers, in undertaking potato projects for effective research and transfer of effective and environmentally friendly crop nutrient technology and agricultural expertise.

Tumeiyo (7) explains that community resourcing on donor-funded potato projects is a major source of concern. He also points out that the provision of land as a means of project resourcing to the donor-funded potato project merges both potato project beneficiaries and the donor, which is not the case in this instance. Project ownership has been impacted, and if the current scenario continues, potato projects, which are still a topic of discussion, will be affected as well.

As argued by LelegweL (8), community members are not encouraged to engage in the project by giving physical resources from the project conception to the project design to the project implementation to the project monitoring and evaluation phases. According to Andrade-Piedra (9), the supply of land by community members is vital for the long-term viability of potato projects in the area. In addition, it is from this area that seed potato plots are established for planting.

For potato projects, however, it is not apparent if the land should be made available for free for seed potato displays. According to the Ministry of Finance (10), the poor performance of potato initiatives in the region is attributable to land disputes between members of the community. This has had a significant impact on the performance of potato projects; as a result, this research discovered that the provision of land is an important attribute of potato project

resourcing that has not been practiced by donors, which has had an impact on donor-funded potato projects after the donors have left.

Fertilizer is one of the most important agricultural inputs that help to increase productivity in America, Asia, and Europe, among other places. Because of soil erosion and over-cultivation of land, according to a report by the Canadian Potato Commission for the 2009/10 growing season, both organic fertilizer and organic fertilizers are recommended for use to boost potato production. Donors want to see potato programs become self-sustaining by boosting productivity and enhancing the well-being of farmers, among other things. However, according to Parry-Jones et al (11) donors are not supplying any non-organic or organic manure to potato growers, while at the same time they are not permitting farmers to give them with their manure. The total volume of fertilizer expected to be applied to the area under potato plots is approximately 4 million quintals, of which potato accounts for 45,519 quintals, according to Silvius et al (12). The total area to which fertilizer was applied is estimated to be more than 5 million hectares, of which potato accounts for 46,406 hectares, according to Silvius et al (12). More than 2.8 million quintals of a mixture of UREA and DAP were used, accounting for more than a quarter of the total volume of fertilizers applied.

According to Hofisi and colleagues (13), agriculture is distinguished by low-slung and immobile yields. Furthermore, the sector is characterized by an over-reliance on rain-fed agriculture, which increases the sector's

vulnerability to weather-related shocks, which can hurt seed potato output.

In this study, it was discovered that the provision of organic or inorganic fertilizer by project beneficiaries increases potato production and that the methodological application that will be used by donors to allow community members to participate in the potato project for sustainability will be used to allow community members to participate in the potato project. Farmers, on the other hand, have not been educated on how to create this fertilizer, according to Thwala (14) who noted that this is due to tiredness and erosion.

The use of organic or inorganic fertilizers to increase soil fertility to maximize potato yield is not always advocated by the manufacturer. Shunka (15) indicates that the type of organic or inorganic fertilizers used to improve soil fertility has had a significant impact on the long-term viability of donor-funded potato operations in Africa. Beneficiaries of potato initiatives are uncertain about the rate at which land is being depleted, and they are unsure if potato programs will be financially viable without the support of donors. This is because funders have not provided beneficiaries of potato programs with training on how to properly handle manure. Because of this, this study conducted inquiries into which sort of fertilizer should be used and at what stage during project implementation fertilizer is required, as well as who is accountable after the donor has left the project. Lungo et al (16) indicated that the rate of fertilizer application should be 0.056 kg per sq.m. They also recommended that donors always include farmers in learning how to use their organic manure after they have left the country. However, depending on the number of soil nutrients present, this could differ. The question of whether 0.056kg will be sufficient to improve seed potato production

and if it will be contributed by individuals or potato farmer organizations within the community must also be thoroughly investigated.

When it comes to making the transition from extensive to intense agriculture, Bonabana-Bonabana (17) discovered that there is a significant difference between Africa and Asia. It has been demonstrated that southeast Asian countries have made greater progress in modernizing their agricultural sector than sub-Saharan countries, as evidenced by data on cereal yield and fertilizer consumption per hectare. As a result, productivity per hectare has increased significantly relative to sub-Saharan countries.

Specifically, Mbowa et al (18) point out that there has been very little engagement of community members in donor-funded potato initiatives, particularly in terms of labor provided by those who benefit from the potato projects. In their respective studies, Aheisibwe et al (19) and Joseph et al (20) argued that the lack of provision of labor by the potato project beneficiaries themselves is a stumbling block to ownership of the potato project. He went on to say that the limited availability of community-owned labor on potato-funded projects does little to improve the physical state of the potato life and, as a result, results in a decline in potato production. It was discovered in this study that labor provided by stakeholders will contribute to the long-term viability of potato projects, and it made recommendations on how donors should educate potato project beneficiaries on the importance of providing labor to the potato projects before they leave the project. This fact has been discovered

Bartlett(2) explains that donor-funded potato projects have proven to be difficult to implement due to the low level of participation by potato project beneficiaries in contributing to project resources such as

land provision, manure provision (both organic and inorganic), and cost-sharing of project operations. They are, in a real sense, not contributing to the project's operations, which should be focused on acquiring land first. Potato project ownership will not be achieved unless and until they are involved in the provision of tangible resources during the design and implementation phases of the project. In his explanation, Mudege (3) reported that land is vital for the long-term viability of donor-funded potato programs. The area is being used as a demonstration location where potato producers may learn from one another, which is not the case with most donor-funded potato programs in the United States. There is widespread consensus that successful farmers must gather more food per unit of land than is required by law.

To achieve the desired findings and outcomes of this study, the following objectives and intentions of this research investigation must be met: to provide a roadmap on the road to achieving the desired findings and outcomes of this study, as defined below.

### **Hypothesis**

H01: There is a favorable relationship between project resourcing and the long-term viability of donor-funded potato programs in Kabale District, South Western Uganda, according to the findings.

### **Objective**

To determine the effect of project resourcing on the sustainability of donor-funded potato projects in Kabale District. Thus, the goal of this research is to investigate the impact of project resourcing on the long-term viability of donor-funded potato programs in the Kabale District.

## Materials and Method

A descriptive research design was used in the study. A specific occurrence is considered at a specific time in the prevalence study design. Prevalence studies are appropriate for studies aimed at discovering the emergence of an occurrence, situation, problem, or attitude by determining a specific group of the population at a given time. As a result, the prevalence research design is a type of observational study that discovers data collected from a population or a representative subset, whereas the

correlational research design is a quantitative approach to research in which two or more variables from a similar group of subjects are used to determine whether or not an association exists.

There were 198 participants in the study. The study included 131 individual potato farmers, 24 potato farmer groups, ten district marketing, and production departments, thirteen community development officers, and thirteen sub-county chiefs. The total number of respondents sought was 196. As a result,  $338+26+10+13+13=196$ . In total, there are 400 people in the target population.

**Table 1 Sample size strategy.**

Population category	Target Population	Sample Size	Sampling Techniques
Potato individual farmer	338	131	Simple random sampling
Potato farmer groups	26	24	Simple random sampling
District marketing and production department	10	10	Purposive
Community Development officers	13	10	Purposive
Sub County Chiefs	13	10	Purposive
Total	400	196	

A questionnaire was selected because it allows for in-depth investigation of the issue, the acquisition of firsthand information, and the accumulation of additional experience in

a short amount of time. Using a questionnaire was chosen because it increases the degree of dependability due to the large number of items included in it, and it also increases the

likelihood of obtaining correct data. Closed-ended questions were included in the questionnaire, as well as open-ended questions. In this particular instance, the self-administered questionnaire was distributed to the members of 131 Potato farmer organizations and 24 Potato Associations. Closed-ended questions were used to collect quantitative data, while open-ended questions were used to collect qualitative data. Both types of data were collected using a 5-point Likert scale, with 5 representing strongly agree, 4 representing agree, 3 representing neutral, 2 representing disagree, and 1 representing strongly disagree. They were self-administered questionnaires in which the respondents were required to tick the boxes that corresponded to the instructions on the questionnaire. According to Mbugua et al., a self-administered questionnaire allows respondents the freedom to complete the instrument at their own pace and with sufficient time. It was decided that questionnaires would be administered because there were a significant number of respondents; as a result, they proved to be the most convenient and least expensive method of gathering data in this situation.

### Data Quality Assurance and Control (Validity and Reliability)

All research is focused on the production of valid and trustworthy knowledge in an ethical manner. The following data quality control approaches were used to verify that the data obtained was valid and reliable: the instruments were tested first to ensure that they were valid and reliable, and then the data was checked for validity and reliability.

### Validity

The degree to which a test measures what it is intended to measure is known as its validity. Because the study aims and issue demanded credible findings, conclusions, and recommendations, the researcher checked that all instruments were valid for efficiency and effectiveness before submitting them to a formal review. To ensure that the instruments are thorough, clear, easy, and relevant to the study objectives, they were devised and discussed with specialists in the field before being implemented. The validity tests were conducted using the CVI whose formula;

$$CI = \frac{\text{Number of relevant items}}{\text{total number o items}} \times 100$$

$$= \frac{100}{110} \times 100 = 99.9$$

Summary of the reliability statistics ,

Judge 1. = 190/196=0.969,  
 Judge 2. =192/167= 0.979  
 Judge 3. = 189/167= 0.964  
 Judge 4. = 185/196=0.944

Therefore

total,0.969+0.979+0.964+0.944=3.856.  
 3.856/4=0.964

These results implied that research instruments were valid to be used for the data collection on the community participation and sustainability of donor-funded potato projects in Kabale District. Amin, (21) said that, for instruments to be accepted as valid the average content validity index (CVI) no. of items declared valid divided by the total No. of items = at least 0.7. Since the CVI value is above 90%, then the instruments were valid, Amin (26).



### Reliability of the questionnaire

The reliability of the questionnaire is the extent to which a questionnaire produces the same result on the repeated trials, hence the stability or consistency of scores over time. The reliability of the questionnaire was ensured by training of researcher assistants before the study, pretesting the questionnaire, and calculation of Cronbach's alpha ( $\alpha$ ) which was developed by Lee Cronbach in 1952 to measure reliability or how well a test measures what it should.

### Pretesting of the questionnaire and Cronbach alpha test

The questionnaire was pretested in Rubanda District as part of pilot research that was done to ascertain the Cronbach alpha. It is located in South Western Uganda, and it borders Kabale District to the north, the Republic of Rwanda to the south, Kisoro to the southwest, and Kanungu and Rukungiri Districts to the east. Rubanda District is comprised of several sub-districts. The population is therefore likely to share traits with the intended study participants, which is a good thing. The pilot study received responses from a total of 15 participants. SPSS version 23 was used to enter the data gathered from the pilot study/test and to analyze it for reliability, which was done using the Cronbach alpha test in SPSS version 23. The following is an example of how the data was analyzed based on the exclusion of the independent variable.

**Table 2: Dimensions of the Independent Variables**

Variable	Reliability statistics
Project design and implementation	0.890
Project resourcing	0.904
Project monitoring and evaluation	0.941
Sustainability	0.866
Total	3.601
Average	$3.601/4=0.900$

Source: Field data 2021.

Cronbach's Alpha was 0.900. a reliability coefficient (alpha) of 0.7 range is considered acceptable and those above 0.9 are

considered good. Therefore, the questionnaire had good reliability.

## Data Analysis

Following the fieldwork, the data were entered into the Statistical Package for Social Science (SPSS) version 21 and subjected to a systematic cleaning process before being subjected to hypothesis testing and analysis. To dissect the data collected, two statistical software packages were used. Preliminary

data analysis was carried out using SPSS version 21, whereas Structural Equation Modelling (SEM), guided by confirmatory factor analysis, was carried out using Analysis of Moments of Structures (AMOS) version 21.

## Results

**Table 3: Summary of the major findings of this study**

Statement	Disagreed		Undecided		Agreed		Mean	Standard deviation
	F	%	F	%	F	%		
I have been involved in donor-funded potato projects in Kabale District	92	49.4	3	1.5	101	51.5	2.8673	1.56000
I have provided land for donor-funded potato projects	97	49.4	43	21.9	60	30.6	2.5766	1.36222
I have participated in setting donor-funding potato demonstrations on the land provided to the project.	123	62.3	21	10.7	52	26.6	2.3827	1.34412
For donor-funded potato project sustainability, I have been cost-sharing on the progress of the project.	124	63.3	13	6.6	59	30.1	2.4541	1.43328
My contribution to the donor-funded potato project has been 10%	126	64.2	10	5.1	60	30.6	2.4643	1.41557
Cost-sharing has increased my participation in the donor-funded potato project	125	63.8	8	4.1	63	32.2	2.4745	1.45509

I have been trained on how to make organic manure as a fertilizer	133	67.8	8	4.1	55	28.5	2.3265	1.38694
I have contributed organic fertilizer to donor-funded potato plantations in our area	134	68.3	5	2.6	57	29.1	2.3316	1.38387
I have been able to contribute to donor-funded potato projects	193	89.3	4	2.0	56	28.5	2.2092	1.37126
I have benefited from donor-funded potato projects	132	67.8	6	3.1	58	29.6	2.2296	1.37126
With my knowledge, donor-funded potato projects will be sustainable.	137	69.9	3	1.5	56	28.6	2.2245	1.39251

**Source: Field data 2021**

Analyses of eleven (11) statements that were submitted to respondents and intended to measure project resourcing and sustainability of donor-funded potato projects in Kabale District are provided below: The following are the explanations for the descriptive statistics in the table above:

In this study 51.5 percent of the respondents confirmed that they had been involved in donor-funded potato projects, compared to 49.4 percent of the respondents who disagreed with a mean and standard deviation of 2.8673 and 1.56000, respectively. If the respondents had provided land for donor-funded potato projects, a second question was asked, Again, 49.4 percent of participants he respondents had not provided land for donor-funded potato projects, compared to 30.6 percent of those who did, with a mean of 2.5766 and a standard deviation of 1.36222

While 63.3 percent of responds had set up donor funded potato demonstrations in the project land, 26.6 percent had not and 10.7 percent of the respondents were undecided

(mean and standard deviations = 2.3827 and 1.34412).

About 63.3 percent of respondents had not participated in the donor-funded potato project, compared to 30.1 percent of respondents who did and 6.6 percent of respondents that were undecided with a mean and standard deviation of the data were 2.4541 and 1.43328, respectively. A total of 64.2 percent of respondents could not confirm that their contribution to a donor-funded potato project has been 10 percent, compared to 30.6 percent of respondents that participated more, with a mean of 2.4643 and an SD of 1.41557

Exactly 63.8 percent of respondents could not confirm that cost-sharing has increased community members' participation in donor-funded potato projects, while 32.2 percent of respondents did and 4.1 percent were undecided with mean and standard deviation of the survey were both 2.4745 and 1.45509, respectively. About 67.8 percent of respondents had not received training on how to make organic manure as a fertilizer,

compared to 28.5 percent of respondents who did that did and 4.1 percent of undecided respondents (mean and standard deviation for the survey were 2.3265 and 1.38694). Again 68.3 percent of respondents had not donated organic fertilizer to donor-funded potato plantations in our area, compared to 29.1 percent of respondents that did (mean and standard deviation of the responses were 2.3316 and 1.38387}.

An overwhelming 89.3 percent of respondents had not contributed to donor potato-funded projects, compared to 28.5 percent of respondents that did (mean of 2.2092 and a standard deviation of 1.37126). While 67.8 percent of respondents had not benefited from donor-funded potato projects compared to 29.6 percent that did (mean of 2.2296 and standard deviation of 1.37126 and a mean of 2.2296 and standard deviation of 1.37126). Finally, 69.9 percent of respondents confirmed that donor-funded projects would not be financially sustainable; while 28.6 percent confirmed it (mean deviation of 2.2245 and a standard deviation of 1.39251).

### Testing of hypotheses

Inferential statistics were used to determine whether or not there was a relationship between the independent and dependent variables, the magnitude and direction of those relationships, as well as to establish the relationship model and test both hypotheses, correlation and regression analyses were carried out.

To test the alternative hypothesis that project resourcing has a positive impact on the sustainability of donor-funded potato projects in Kabale District, the following research was conducted: It was thus necessary to calculate the magnitude of the relationship using the Pearson's product-

moment correlation coefficient, as shown in the table below:

Project resourcing and how it positively impacts the sustainability of donor-funded potato projects in Kabale District were investigated through correlation analysis.

In the Kabale District, the correlation coefficient of 0.964 indicates that project resourcing has a positive relationship with the long-term viability of donor-funded potato projects. Thus, a regression analysis was conducted to determine the strength of the relationship between project resourcing rates and the sustainability of donor-funded potato projects, or, more specifically, how much of the variance in the independent variable would affect the sustainability of the dependent variable.

It can be deduced from the coefficient of determination (.962) that project resourcing has an impact on the sustainability of donor-funded potato projects in the Kabale District.

In this way, there is a significant positive relationship between project resourcing and the long-term viability of donor-supported potato projects. This means that the greater the level of community participation in project resourcing, the greater the likelihood of donor-funded potato projects in Kabale District remaining sustainable. So project resourcing contributes 96.2 percent to the sustainability of donor-funded potato projects in Kabale District, according to the data.

The outcome revealed a regression coefficient of 0.962 at the 0.01 level of significance, indicating a positive sign once more. Moreover, the findings demonstrate

that project resourcing has an impact on the sustainability of donor-funded potato projects in Kabale District, with a Beta value of 0.962 at the 95 percent level of confidence. The researcher has therefore developed an alternative hypothesis, which states that "project resourcing positively influences the sustainability of donor-funded potato projects in Kabale District." The continuation of donor-funded potato projects in Kabale District is therefore made possible by project resourcing, which contributes 96.2 percent.

According to the findings of the study, there is a positive and statistically significant relationship between project resourcing and the long-term viability of donor-funded potato projects in Africa. It has been found that project resourcing dimensions such as the provision of land, cost-sharing, the provision of organic fertilizer, and the provision of labor have a significant impact on the sustainability of donor-funded potato projects in the Kabale District.

The pairwise correlation matrix revealed a positive and statistically significant relationship between project resourcing and the sustainability of donor-funded potato projects ( $r=0.962^{**}$ ,  $p<0.01$ ) as a result of the correlation analysis carried out to achieve objective two, which was to ascertain the impact of project resourcing on the sustainability of donor-funded potato projects. According to the study's findings, improving project resourcing elements would lead to greater sustainability for donor-funded potato projects operating in the Kabale District. A regression model was used in the study to confirm the relationship and, as a result, the contribution of project

resourcing. According to the findings, project resourcing contributes 96.9 percent (R Square change = 0.962) to the sustainability of donor-funded potato projects in the Kabale District.

When all other variables are held constant, the findings indicate that increasing the amount of money allocated to a project improves the long-term viability of donor-funded potato projects in the Kabale District. Furthermore, project resourcing is a significant predictor of the long-term viability of donor-funded potato projects in Kabale District ( $\beta = 1.000$ ,  $P < 0.01$ ;  $p = 0.000$ ), according to the model results. Furthermore, key informant findings revealed that project resourcing has an impact on the sustainability of donor-funded potato projects. As a result, several potato projects, among other things, must be sensitized to project ownership and demonstrate maximum availability for the project.

## Discussion

The study's findings show a positive and significant relationship between project resourcing and the sustainability of donor-funded potato projects in the Kabale District ( $r=0.962^{**}$ ,  $p<0.01$ ). This means that better project resourcing influences the provision of land, cost-sharing, organic fertilizer, and labor. This is consistent with According to Pérez (1) and Bartlett (2), donor-funded potato projects have been difficult because project owners are not involved in providing resources such as land for site potato demonstrations.

They are, in fact, not contributing to project activities where land should be prioritized. There will be no ownership of the potato project unless the participants provide physical resources during project design and implementation. Mudege (3) explains that land is critical to the long-term viability of donor-funded potato projects. Unlike donor-funded potato projects, the land is used as a demonstration site where potato farmers can learn. There is widespread agreement that successful farmers must harvest more food per unit of land.

However, modalities for the land provision by potato project beneficiaries are lacking. This is because donors are uninterested in the contributions of potato recipients. Giovannucci (4) and Hofisi (5) believe that for agricultural projects, such as potato projects, to be sustainable, project stakeholders must provide their resources, giving them more motivation to own their projects, which has not been done. Donors have ignored the concept of potato project beneficiaries providing land to the project, which has hampered the long-term viability of these donor-funded potato projects.

According to Tumeiyo (7), community resourcing on donor-funded potato projects is a major concern. adds that the issue of providing land as a means of project resourcing to the donor-funded potato project merges both potato project beneficiaries and the donor, which is not the case here. Project ownership has been harmed, and if the situation persists, potato projects will be jeopardized. LelegweL (8) that providing physical resources from project formulation, design, planning, implementation,

monitoring, and evaluation does not motivate community members to participate in the project.

According to Andrade-Piedra (9), community members' provision of land is critical for the sustainability of potato projects. Furthermore, it is from this land that seed potato plots are established. However, it is unclear whether free land for seed potato demonstrations is available for potato projects. According to the Ministry of Finance (10), the poor performance of potato projects in the region is due to land disputes among community members. This has had a significant impact on the performance of potato projects, as this research discovered that the provision of land is an important aspect of potato project resourcing that has not been practiced by donors, affecting donor-funded potato projects after donor exit.

According to Parry-Jones et al (11) donors do not provide any non-organic or organic manure to potato farmers and do not allow farmers to provide it themselves. According to Silvius et al (12), the total volume of fertilizer expected to be applied to the area under potato plots is approximately 4 million quintals, of which potato accounts for 45,519 quintals, and the extent of the area to which fertilizer was applied is estimated to be more than 5 million hectares, of which potato accounts for 46,406 hectares. More than 2.8 million quintals of a UREA/DAP mixture were used out of the total volume of fertilizers used. The total amount of UREA and DAP used on potato land was approximately 17,405 quintals (CSA, 2010b). According to Mbowa et al (18), there has been little participation of community

members in donor-funded potato projects in terms of labor provision by potato project beneficiaries.

According to Aheisibwe et al (19) and Joseph et al (20), potato project ownership is jeopardized due to the beneficiaries' failure to provide labor. He went on to say that the limited community-owned labor on potato-funded projects does not improve the physical condition of the potato life and leads to decreased potato productivity. This research identified how stakeholders' provision of labor will contribute to the sustainability of potato projects, as well as recommendations on how donors should encourage potato project beneficiaries to provide labor to potato projects before they exit.

### **Conclusion & Recommendations**

Donor-funded potato projects face sustainability challenges across all project

### **Abbreviations**

- CVI: Content Validity Index
- Et al: And others
- AMOS: Analysis of Moments of Structures
- SEM: Structural Equation Modelling
- IFDC: International Fertilizer Development Centre

### **Acknowledgments**

Authors would like to appreciate the moral support of their colleagues at various levels for their unwavering support towards the accomplishment of this project

resourcing paradigms (land, cost-sharing, organic fertilizer, and labor).

To ensure the long-term viability of donor-funded potato projects, donors should allow potato project beneficiaries to participate in project resourcing by providing land, inorganic manure, and cost-sharing so that they know they have a stake in the project they are implementing.

There is a need for research into the utility of project resourcing and project continuity among potato farmers.

### **Conclusions**

Largely for all the paradigms of project resourcing (land, cost sharing, organic fertilizer and labour) indicates that donor funded potato projects have got challenges of sustainability. The study concludes that the project, beneficiaries don't participate in project resourcing in sustainability of donor funded potato projects in Kabale District.

### **Author's contributions**

**Turyasingura<sup>2</sup>.JB:** Conceptualization, literature review, data collection and interpretation, final report writing and review corrections. **Agaba<sup>1</sup>.M:** Literature review, data collection and interpretation and final report writing and review corrections. **Orach-Meza<sup>2</sup> FI:** Conceptualization, literature review, data collection and interpretation and final report writing. **Zombire<sup>2</sup> R:** Conceptualization, literature review, data collection and interpretation and final report writing. **Kyabarongo B<sup>1</sup>:** Data collection and interpretation and final report writing and proof reading

### Funding

Self-sponsored from the private fund from authors

### Availability of data materials

Any supplementary data needed is available from the corresponding author on request

### Conflict of interests

The authors declare they have no competing interests with study design or final report, no financial or personal relationships with other people or organizations that could inappropriately influence this research.

### Reference

1. Pérez-Arce P. The influence of culture on cognition. *Archives of Clinical Neuropsychology*, 1999. 14(7), 581–592. [https://doi.org/10.1016/S0887-6177\(99\)00007-4](https://doi.org/10.1016/S0887-6177(99)00007-4)
2. Bartlett AG. Evaluating the relative success of donor-funded collaborative research projects. *Research Evaluation*, 2016, 25: 405–415. <https://doi.org/10.1093/reseval/rvw009> 0778738616
3. Mudege NN. *Gender and Roots Tubers and Bananas Seed Systems : A Literature Review*, pg 26, International Potato center 2016
4. Giovannucci D, Scherr SJ, Nierenberg D, Hebebrand C, Shapiro J, Milder JC, & Wheeler K. Food and Agriculture: the future of sustainability. A strategic input to the Sustainable Development in the 21st Century (SD21) project. Retrieved from [http://www.un.org/esa/dsd/dsd\\_sd21/21\\_pdf/agriculture\\_and\\_food\\_the\\_future\\_of\\_sustainability\\_web.pdf](http://www.un.org/esa/dsd/dsd_sd21/21_pdf/agriculture_and_food_the_future_of_sustainability_web.pdf), 2012
5. Hofisi C, & Chizimba M. The sustainability of donor-funded projects in Malawi. *Mediterranean Journal of Social Sciences*, 2013, 4(6): 705–714. <https://doi.org/10.5901/mjss.2013.v4n6p705>
6. Personal M, & Archive R. Munich Personal RePEc Archive Analysis of Factors Affecting Potato Farmers ' Gross Margin in Central Ethiopia : The Case of Holeta District Analysis Of Factors Affecting Potato Farmers ' GROSS. (92366). 2019
7. TUMEIYO R. C. Influence of Community Participation on Sustainability of Donor Funded Food Security Projects : a Case of World Vision Marigat Area Development Programme in Baringo South Sub-County., University Of Nairobi 2014
8. Lelegwe Ltumbesi Steve. Influence of Community Participation on Community Ownership of Donor Funded Projects: A Case of Saidia, Samburu County, Kenya. *Humanities and Social Sciences*. 2015, 3, (5): 193-200. doi: 10.11648/j.hss.20150305.15
9. Andrade-Piedra J, Bentley J, Almekinders C, Walsh K, & Thiele G. Case Studies of Roots, Tubers, and Banana Seed Systems. *CGIAR Research Program on Roots, Tubers and Banana (RTB), Lima: RTB Working Paper N° 2016-3. ISSN 2309-6586.244P.*, 244. 2016
10. Uganda Ministry of Finance, P. and E. D. Agriculture Sector Semi-Annual Budget Monitoring Report. 2019.
11. Parry-Jones S, Reed R, & Skinner BH. Sustainable Handpump Projects in Africa: Report on Fieldwork in Uganda.



- Development*, 47. Retrieved from <http://wedc.lboro.ac.uk/docs/research/>, 2018
12. Silvius AJG, & Schipper R.PJ. Sustainability in project management: A literature review and impact analysis. *Social Business*, 2014, 4(1); 63–96. <https://doi.org/10.1362/204440814x13948909253866>
  13. Hofisi C, & Chizimba M. The sustainability of donor-funded projects in Malawi. *Mediterranean Journal of Social Sciences*, 2013, 4(6): 705–714. <https://doi.org/10.5901/mjss.2013.v4n6p705>
  14. Thwala WD. *Community participation is a necessity for project success : A case study of rural water supply project in Jeppes Reefs, South Africa*. 2010, 5(10): 970–979. <https://doi.org/10.5897/AJAR09.700>
  15. Shunka E, Chindi A, & Giorgis GW. Response of Potato (*Solanum tuberosum* L.) Varieties to Nitrogen and Potassium Fertilizer Rates in Central Highlands of Ethiopia. *Advances in Crop Science and Technology*, 2016, 04(06). <https://doi.org/10.4172/2329-8863.1000250>
  16. Lungo M P, Mavole J, & Martin O. Determinants of Project Sustainability beyond Donor Support: Case of Caritas Norway Supported Governance Project in Mansa Diocese, Zambia. *Arts and Social Sciences Journal*, 2017, 08(03).
  17. Bonabana-Wabbi J. S. Ayo, B. Mugonola, D. B. Taylor, J. Kirinya, M. Tenywa, The performance of potato markets in South Western Uganda. *Journal of Development and Agricultural Economics*, 2013, 5(6): 225–235.
  18. Mbowa, S. and, & Mwesigye, F. (2016). *Investment Opportunities and Challenges in the Irish Potato Value Chain in*. Economic policy Research center, Research report number 14, 1–173. <https://ageconsearch.umn.edu/>
  19. Aheisibwe AR, Barekye A, Namugga P, & Byarugaba AA. Challenges and opportunities for quality seed potato availability and production in Uganda. *Uganda Journal of Agricultural Sciences*, 2015, 16(2), 149–159. <https://www.google.com/url>
  20. Joseph E, Mwesige R, Kyarisiima S, Aheisibwe A, Muhereze R, Kutesa RA, & Barekye A. *Seed Potato Production Business through a Gender Lens Keywords*. 2019, 2(2), 1–11. <https://www.google.com/url>
  21. Amin, ME *Social Science Research: Conception, Methodology and Analysis*. Makerere University Press, Kampala. 2005.

Submit your original papers to Special Journal of Politics and Economic Sustainability through our online data management system at <https://sipols.spparenet.org/submit/>